DOCUMENT RESUME

ED 167 650 UD 018 891

AUTHOR	Alers, Jose Oscar; And Others
TITLE	Puerto Ricans and Health. Findings from New York City. Monograph Number One.
INSTITUTION	Fordham Univ., Bronx, N.Y. Hispanic Research Center.
SPONS AGENCY	National Inst. of Mental Health (DHEW), Rockville, Md. Center for Minority Group Mental Health Problems.
PUB DATE	Jun 78
GRANT	1-R01MH30569-01
NOTE	106p.
EDRS PRICE	MF-$0.83 HC-$6.01 Plus Postage.
DESCRIPTORS	*Community Health Services; *Employment Opportunities; Health Needs; Manpower Utilization; *Medical Services; Mental Health; Psychiatric Services; *Puerto Ricans; *Social Attitudes
IDENTIFIERS	*New York (New York)

ABSTRACT

Principal quantitative findings on the health of Puerto Ricans in New York City are brought together in this monograph. The statistics provided refer to mortality, morbidity, services, manpower, and attitudes toward health services. In each of these areas, comparisons are made between Puerto Ricans and other racial/ethnic groups or the total population of the city. A number of recommendations are made for actions that should be taken by public or private agencies or elected officials to alleviate the conditions highlighted by the data presented. A bibliography is included. (Author/EB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED167650

PUERTO RICANS AND HEALTH

FINDINGS FROM NEW YORK CITY

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

By

Jose Oscar Alers, Ph.D.
Coordinator, Puerto Rican
Migration Research Consortium, Inc.

With the assistance of:

Natasha Krnitzky, M.A.
Louis Barnadas, M.S.
William Rios, M.A.
Antonio Stevens-Arroyo, M.A.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Lloyd H. Rogler
Hispanic Research Ctr.

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

Monograph Number One produced by the Hispanic Research Center.

Lloyd H. Rogler, Principal Investigator
Fordham University
Bronx, New York 10458, June 1978

UD018891

NOV 1978
ERIC/CRESS
RECEIVED

HISPANIC RESEARCH CENTER

MONOGRAPH SERIES

Monograph Number One

Puerto Ricans and Health: Findings from New York City

The Hispanic Research Center is supported by Research Grant 1RO1MH30569-01 from the National Institute of Mental Health, Center for Minority Group Mental Health Programs.

Copyright © 1978 by Hispanic Research Center.

CONTENTS

Foreword		xi
Preface		xiii
I.	POPULATION AND MORTALITY	1
	A. Population by Borough and Age	1
	B. Chief Causes of Death	2
	C. Maternal and Infant Mortality	11
II.	SELECTED HEALTH PROBLEMS	15
	A. Mental Illness and Retardation	15
	B. Drug Abuse	21
	C. Lead Poisoning	27
III.	UTILIZATION OF HEALTH SERVICES	31
	A. Characteristics of Ambulatory Care Visits	32
	B. Methods of Payment and Clinics Utilized	36
	C. Inpatient Care	40
IV.	PHYSICIANS IN PRIVATE PRACTICE	43
	A. Availability of Physicians	44
	B. Quality of Physicians	51
V.	PUBLIC HEALTH MANPOWER RESOURCES	57
	A. Total Employment	57
	B. Distribution by Occupation	59
	C. Recent Trends	62
VI.	ATTITUDES TOWARD HEALTH AND HEALTH SERVICES	69
	A. Importance of Health and Health Problems	69
	B. Medical Care and Health Status	73
VII.	SUMMARY AND RECOMMENDATIONS	79
	A. Definitions and Data	79
	B. Mortality and Morbidity	80
	C. Services and Manpower	84
	D. Attitudes and Actions	88
Selected Bibliography		91

TABLES

1. Residence of Racial/Ethnic Groups by Borough, New York City, 1970 3
2. Percent Distribution of the Total and Puerto Rican Populations, by Age Groups, New York City, 1970 4
3. Average Annual Mortality Rates from Chief Causes for All Ages, Total and Puerto Rican Born Populations, New York City, 1969-1971 6
4. Average Annual Mortality Rates from Chief Causes for Ages Under 15 and 15-44, Total and Puerto Rican Born Populations, New York City, 1969-1971 8
5. Average Annual Mortality Rates from Chief Causes for Ages 45-64 and 65+, Total and Puerto Rican Born Populations, New York City, 1969-1971 10
6. Annual Maternal Mortality Rates per 10,000 Live Births, by Racial/Ethnic Group, New York City, 1963-1976 12
7. Annual Infant Mortality Rates per 1,000 Live Births, by Racial/Ethnic Group, New York City, 1963-1976 14
8. Number and Rate per 100,000 Population of Admissions to Community Mental Health and Mental Retardation Facilities, by Psychiatric Diagnosis and Racial/Ethnic Group, New York City, Fiscal Year 1973-1974 17
9. Number and Percent of Admissions to Community Mental Health and Mental Retardation Facilities for the Five Most Common Psychiatric Diagnoses, by Racial/Ethnic Group, New York City, Fiscal Year 1973-1974 19
10. Number and Percent of Admissions for Psychotic Organic Brain Syndrome and for Non-Physical Psychoses to Community Mental Health and Mental Retardation Facilities, by Type of Psychosis and Racial/Ethnic Group, New York City, Fiscal Year 1973-1974 20
11. Number and Percent of Admissions for Mental Retardation to Community Mental Health and Mental Retardation Facilities, by Degree of Retardation and Racial/Ethnic Group, New York City, Fiscal Year 1973-1974 22

12. Rates per 100,000 Population of Individuals First Reported to the New York City Narcotics Register, by Racial/Ethnic Group, 1971 - 1974 24

13. Percent of Persons First Reported to the New York City Narcotics Register, by Racial/Ethnic and Age Groups, 1971 - 1974 26

14. Lead Poisoning Cases in New York City for Selected Years 28

15. Lead Poisoning Cases in New York City, by Age and Racial/Ethnic Group, January 1 to September 30, 1971 29

16. Percent of Visits to Outpatient Departments by Racial/Ethnic Group Members Within Hospital Type, Southern New York Region, 1974 32

17. Percent of Visits to Outpatient Departments, by Racial/Ethnic Group and Hospital Control, Southern New York Region, 1974 33

18. Percent of Visits to Emergency Rooms by Racial/Ethnic Group Members Within Hospital Type, Southern New York Region, 1974 33

19. Percent of Visits to Emergency Rooms, by Racial/Ethnic Group and Hospital Control, Southern New York Region, 1974 34

20. Percent Distribution of Racial/Ethnic Groups by Income in Outpatient Departments for All Hospitals, Southern New York Region, 1974 35

21. Percent Distribution of Racial/Ethnic Groups by Income in Emergency Rooms for All Hospitals, Southern New York Region, 1974 37

22. Percent Distribution of Racial/Ethnic Groups by Method of Payment for Outpatient Departments, All Hospitals, Southern New York Region, 1974 37

23. Percent Distribution of Racial/Ethnic Groups by Method of Payment for Emergency Rooms, All Hospitals, Southern New York Region, 1974 38

24. Percent Distribution of Visits to Clinics by Racial/Ethnic Groups, All Hospitals, Southern New York Region, 1974 40

25. Percent Distribution of Inpatients by Racial/Ethnic Group and Hospital Control, New York City, 1975 41

26. Physicians in Private Practice per 100,000 Population, by Primary Interest, Health Area and Borough, New York City, 1967 45

27. Physicians in Private Practice per 100,000 Population in Predominantly Puerto Rican, Black and White Health Areas, by Borough, New York City, 1967 47

28. Percent of Physicians in Private Practice in Health Areas With 6,000 or More Puerto Ricans, by Primary Interest and Borough, and Percent of Population Living in These Areas, New York City, 1967 48

29. Physicians in Private Practice per 100,000 Population, by Health Area, Borough and Year, New York City, 1967 and 1975 50

30. Percent Distribution of Physicians in Private Practice, by Age and by Income Level of Census Tract of Office, New York City, 1967 53

31. Percent Distribution of Physicians in Private Practice, by Number of Memberships in Professional Societies and Income Level of Census Tract of Office, New York City, 1967 54

32. Percent of Physicians in Private Practice Without Appointments, by Primary Interest and Income Level of Census Tract of Office, New York City, 1967 56

33. Percent Distribution of Employees of New York City Municipal Hospitals, by Hospital and Racial/Ethnic Group, 1969 58

34. Percent Distribution of Racial/Ethnic Groups by Occupation in the New York City Health and Hospitals Corporation, 1971 60

35. Percent Distribution of Full-Time Employees in the New York City Health and Hospitals Corporation, by Racial/Ethnic Group and Year 63

36. Percent Distribution of Racial/Ethnic Groups by Occupation of Full-Time Employees in the New York City Health and Hospitals Corporation, Fiscal Years 1974 - 1977 66-67

37. Most Important Thing To Have From Life, by Racial/Ethnic Group, East Harlem, 1970 70

38. Problems To Which City Should Give Most Attention, by Racial/Ethnic Group, East Harlem, 1970 71

39. Percent of Spokesmen Citing Given Factors as Major Health Problems of Adolescents, by Racial/Ethnic Group, New York State, 1969 72

40. Percent of Spokesmen Stating that Community Perceives Specific Issues as Health Problems, by Racial/Ethnic Group, New York State, 1969 72

41. Health Problems To Which Doctors Should Give Most Attention, by Racial/Ethnic Group, East Harlem, 1970 73
42. Reasons Cited by Puerto Rican Families for Not Seeking Help Although a Problem Exists, Lower East Side, 1972 74
43. Number and Percent of Puerto Rican Families Using Agency Services and Preferences for Use of Spanish Language Communication, Lower East Side, 1972 75
44. Percent of Spokesmen Evaluating Health Services as Poor or Bad, by Racial/Ethnic Group, New York State, 1969 76
45. Self-Evaluations of State of Health, by Racial/Ethnic Group, East Harlem, 1970 77
46. Percent of Spokesmen Stating that Four Social Issues Are Perceived by Their Community as Related to Health, by Racial/Ethnic Group, New York State, 1969 78

FOREWORD

The author's choice of health as the central topic of this report is, I believe, correct and wise, for health is a pressing concern of mankind no matter what one's station in life may be. The topic attains an even greater relevance in the life of disadvantaged minority persons such as New York City's Puerto Ricans who confront life circumstances which foster ill health and which, at the same time, deny them adequate and appropriate medical facilities for treatment. It is precisely these life circumstances of Puerto Ricans in New York City that constitute the central theme of this monograph.

Not only are Puerto Ricans one of the most disadvantaged minorities in the nation, but they are also victims of indifference and neglect, as Dr. Alers notes early in this report. Occupationally, educationally, and in terms of income, Puerto Ricans are at the very bottom of the urban stratification heap. Most of them live in deteriorated, congested neighborhoods, enjoying very few of the amenities common to American life. Because of the patterned neglect Puerto Ricans experience, few indeed have been the research projects which have sought to examine systematically and with empirical rigor the injurious consequences resulting from their disadvantageous position. Research, after all, tends to focus upon the prevailing concerns of what is thought to be most important to the nation's welfare. However, the plight of Puerto Ricans has been woefully absent from such concerns, and thus neglected by research. The value of this report stems from its determined attempt to redress this imbalance by bringing together a compendium of data focusing upon the health status of Puerto Ricans in New York City.

The documentation found in these pages — from mortality statistics to attitudes toward health and health services — lays bare the health conditions and health needs of New York City's Puerto Ricans. The problem of health is not an arbitrary imposition of the researcher: it is perceived clearly by the Puerto Ricans represented in this report. Thus, more than twice as many respondents in a study in East Harlem viewed health as more important in their lives than economic and family problems (Chapter VI). Indeed, health problems represent the flesh and blood of their everyday lives.

Although the report deals explicitly with mental health problems only in Chapter II, issues regarding mental health are apparent on the surface of the data throughout this work. Mental health or ill health, after all, is not an isolated problem of a person's emotional or behavioral

disturbances; rather it is a problem of how a person's well-being interconnects in a myriad of ways with the pressures, strains, and alternatives of his or her life circumstances. The inadequacy of health facilities in the face of multiple health problems — an issue central to the Puerto Rican experience in New York City — is intrinsically a mental health problem. The roots of this problem extend deeply into the person's life, creating stresses and strains in need of solutions. What the solutions will be remain to be seen. In this regard, the reader is invited to pay thoughtful attention to the recommendations presented here.

This monograph is a product of the Puerto Rican Migration Research Consortium, Inc., which was organized in 1977 as a private, non-profit corporation to study all facets of the Puerto Rican migration experience. Relatively few studies have been done on this subject and those that exist are generally deficient and fragmentary. The Consortium was created to improve the quantity, quality, and integration of research on Puerto Rican migration and to bring together the available pool of researchers for a concerted effort in this area.

The Hispanic Research Center has undertaken the publication of this much needed study on the health conditions of New York City's Puerto Ricans. The publication of this report not only fills a gap in our knowledge of this community, but also initiates a monographic series designed to stimulate interest in Hispanic concerns. The center was established at Fordham University in 1977, under a grant from the National Institute of Mental Health, to work toward five major objectives: (1) to conduct interdisciplinary research on priority issues relevant to the mental health of the Hispanic population, (2) to increase and upgrade the number of Hispanic scholars experienced in doing research in the mental health related disciplines, (3) to provide technical assistance to Hispanic behavioral scientists, professionals, and organizations working to remedy mental health problems in Hispanic communities, (4) to develop meaningful links between individual Hispanic researchers and between these researchers and persons involved in the formulation and implementation of Hispanic relevant public policy, and (5) to disseminate information on the mental health of the Hispanic population.

It is in fulfillment of the latter objective that the Hispanic Research Center presents this monograph.

Lloyd H. Rogler

Fordham University
June 1978

PREFACE

Although Puerto Rican migrants and their descendants in the United States comprise about 40 percent of all Puerto Ricans living in the world today, they constitute only 1 percent of the population of the United States. In part because of their paucity of number, this group has been easy to brush aside or simply ignore; it is therefore not widely known that by almost any measure Puerto Ricans are virtually the most disadvantaged minority in the nation.

In recent years quantitative reports on these disadvantages have begun to proliferate, especially those published by the U.S. Census Bureau, the U.S. Department of Labor, and the U.S. Commission on Civil Rights. These studies have added greatly to our basic knowledge about the condition of Puerto Ricans, but in varying degrees they suffer from three important limitations. First, they focus mainly on economic and educational indicators; of course, these are critical, but they do not exhaust all the concerns affecting Puerto Ricans. Second, with a few exceptions, Puerto Ricans have not been centrally involved in the analysis and publication of the findings. Third, the information produced has barely been utilized to improve the condition of Puerto Ricans.

This study aims to overcome some of these limitations by publishing the most comprehensive analysis of the health of Puerto Ricans in the United States, a previously neglected topic. Puerto Ricans have taken the lead in conceiving and designing the study, collecting and analyzing the data, and writing and publishing the report — assisted by a few fellow Hispanics and others attuned to the goals of the project. Within the modest resources available, the author and his staff are prepared to collaborate with selected individuals and groups, Puerto Rican or otherwise, to implement the recommendations presented in the last chapter for improving the health status of Puerto Ricans.

The reasons for focusing specifically on New York City are based on the following considerations: First, health data on Puerto Ricans in New York City are undoubtedly the best available in the United States, although they are in many ways deficient in quantity and quality, and they never have been brought together in a single general work. Second, in the United States it is primarily in New York City, whose total population is 10 percent Puerto Rican, that Puerto Ricans now dispose of a numerical base sufficient to permit the emergence of the professional personnel necessary to complete research studies of this nature. Third, because of the size of their population base, it is also

primarily in New York City that Puerto Ricans stand the best chance of implementing the kinds of recommendations contained in the present report.

The goal of this monograph is to bring together the principal quantitative findings on the health of Puerto Ricans in New York City. These statistics refer to mortality, morbidity, services, manpower, and attitudes. In each of these areas, comparisons are made between Puerto Ricans and other racial/ethnic groups or the total population of the city. The findings are therefore often relevant to other minority groups, but the specific focus is consistently on Puerto Ricans. An attempt has been made to present the most recent data available, with most of them collected in the early or mid-1970's. With the exception of three time series, the earliest figures apply to 1967 and the latest to 1977.

The statistical analysis found in this report will be understandable to the intelligent layman. There is no complex manipulation of data and no use of technical jargon. Similarly, methodological critiques, extended interpretations, theoretical commentaries, and accusatory statements are de-emphasized. The principal intention is to maximize the impact of the facts by compiling them in one report, thereby making them available for use by a wider public. Much of the data have not been readily accessible to persons other than technical specialists, very few of whom are Puerto Rican.

The monograph, however, is not a simple reproduction or pastiche of published findings. It contains new analyses of previously unpublished data while most of the published material has been recalculated or adapted from the original sources to bring out what is relevant or significant to the Puerto Rican community. Errors have been corrected, the quality of the data has been questioned, and important gaps have been identified.

The materials included are the result of a systematic search for published and unpublished statistics relating specifically to the health of Puerto Ricans. It is possible that some studies or sources have been overlooked, but not all that were found could be included. The latter are listed in the selected bibliography, along with some items that were particularly useful in preparing the recommendations or providing a broader context for the materials reviewed. Limitations of space and resources have precluded all but fleeting references to the social and economic factors affecting the health of Puerto Ricans and those that are influenced by the status of their health.

Initial development of the recommendations benefitted from consultations with Puerto Rican community leaders and health professionals. These recommendations point to actions that should be

undertaken by public or private agencies or elected officials to alleviate the conditions highlighted by the data. The likelihood that these efforts will be of any consequence depends on the extent to which the Puerto Rican community can be organized to achieve them. This refers not only to the educated few, but to the multitude of Puerto Ricans who must be made aware of their health conditions relative to other groups and of the steps that must be taken to improve them. The present report should contribute toward this end.

Preparation of the monograph has depended on the cooperation of many persons and institutions whose efforts are gratefully acknowledged and who bear no responsibilities for its deficiencies.

The project was completed in three phases. The first phase, covering several months in 1975, was directly supported by a grant from the Carnegie Corporation of New York and resulted in the production of an initial draft of the report. During the second phase, in late 1976, the draft was revised by the author. In the final phase, during the spring of 1978, the manuscript was updated and completely rewritten in its final form. This work was made possible, in part, by a grant from the Ford Foundation to the Puerto Rican Migration Research Consortium, Inc. for a research and development program on Puerto Rican migration. Since June 1976 the author, a Puerto Rican sociologist, has served as coordinator of the Consortium, a private, non-profit organization with offices in Manhattan.

It is unlikely that the project would ever have entered its final phase without the cooperation of Lloyd H. Rogler, Albert Schweitzer Professor of Humanities at Fordham University, and Irving Sivin, director of the Biometrics Unit in the Center for Biomedical Research of the Population Council. Dr. Rogler, a Puerto Rican sociologist and member of the Consortium, provided encouragement and sound advice. Fordham University's Hispanic Research Center, which he directs, provided the financial support for the publication of the monograph. Mr. Sivin, a sympathetic non-Hispanic statistician, carefully reviewed the data and made many significant contributions to the final report.

Natasha Krinitzky, a Venezuelan sociologist and research assistant at the Consortium, participated in all aspects of the research and writing during the first and third phases of the project. Louis Barnadas, a Cuban social worker, performed similar services as a research assistant during the first phase. William Rios, a Puerto Rican political scientist and program assistant at the Consortium during the third phase, was instrumental in collecting data and revising the tables and bibliography. Antonio Stevens-Arroyo, a Puerto Rican priest, anthropologist, and member of the Consortium, helped prepare the recommendations in the first phase of the project.

Useful advice during the first phase was provided by Pedro Lecca, Carmen Ostolaza, Paul Ramos, Helen Rodriguez, and Gladys Torres — all Puerto Ricans. Gathering of data contained in the monograph was facilitated by many personal contacts, but special mention should be made of Miriam Gonzalez, Morton Israel, Pedro Lecca, Yetta Machtinger, Farrell McClane, R.W. Lindberg, Frieda Nelson, and Victor Solomon. Ana Maria Diaz designed the cover, Stasia Madrigal performed the final editing of the monograph, and Haydee Matos typed the last two versions of the manuscript. Chapter VI, a revised version of an article published in Puerto Rico by the quarterly *Science-Ciencia*, is reprinted here with permission of the publisher.

Jose Oscar Alers

New York City
June 1978

I. POPULATION AND MORTALITY

Compiling a health profile of the Puerto Rican community in New York City is no easy task; the data are not always available and, when found, they are not entirely accurate. The profile therefore has elements of a game of chance in which numbers are played against each other in an attempt to form a collage descriptive of the health status of Puerto Ricans in New York City.

Even abundant data, however, cannot completely describe a community. At best, data and their statistical analysis can provide the factual background necessary to help evaluate local health services and develop rational plans for improvement.

Inasmuch as this report is concerned with Puerto Ricans, it is essential to clarify how a Puerto Rican is defined by the various institutions that gather data about this community. It cannot be assumed that the term "Puerto Rican" means the same to all or that it denotes a clearly and consistently defined population. For example, the New York City Health Department collects statistical information on Puerto Ricans in two distinct ways. Infant mortality, birth, and prematurity rates have been based on the definition of Puerto Ricans as those of Puerto Rican *parentage*. In compiling general mortality rates, however, only those *born* in Puerto Rico have been included.

The U.S. Census Bureau also uses a limited definition of a Puerto Rican, including only a person of Puerto Rican birth or parentage. This eliminates persons in the third and subsequent generations who still consider themselves Puerto Rican and/or are so defined by the general community.

In addition, terms such as "Hispanic," "Spanish-Speaking," "Spanish-Surnamed," "Spanish-American," "Latin," and even "Minority," are used by various institutions to describe the Puerto Rican population in combination with other groups. Often such usage effectively denies the Puerto Rican a specific identity.

These kinds of variations in the definition of who is a Puerto Rican by different public and private institutions must be noted in the compilation of a statistical profile of Puerto Ricans in the 1970's.

A. Population by Borough and Age

Before presenting health statistics, it is important to visualize the size of the Puerto Rican population in New York City relative to other major racial/ethnic groups. According to 1970 U.S. census figures (Table

1), Puerto Ricans (by birth and parentage) made up 10.3 percent (811,843) of the total New York City population (some have estimated a far larger total). They also comprised about two-thirds of the total number of Hispanics in New York City.

Although the Puerto Rican population is dispersed throughout the city, the largest group was concentrated in the Bronx (39.0 percent), with Brooklyn (33.5 percent) and Manhattan (22.8 percent) each having sizeable numbers. Much smaller percentages lived in Queens and Staten Island. The distribution of blacks was similar to that of Puerto Ricans, although they had a lower proportion in the Bronx and a higher proportion in Queens. Whites were concentrated in Queens and Brooklyn, while 40 percent of the "other" racial/ethnic group (mostly Asian-Americans) lived in Manhattan.

The age distribution of the population is a critical variable in understanding health statistics, as it is in employment, welfare, and social security. The age distribution indicates why a population might need certain health services over others and why vital statistics on births and deaths differ among racial/ethnic groups.

The Puerto Rican population is a relatively young group; in 1970 only 2.7 percent of Puerto Ricans were over 65, compared to 12.1 percent of the total population (Table 2). While 64 percent of Puerto Ricans by birth were 15 to 44 years of age, 73 percent of Puerto Ricans by parentage were under age 15, a common age distribution for a group composed largely of recent migrant families. The median age of all Puerto Ricans in 1970 was approximately 19; the comparable figure for the total population was about 33.

Thus, Puerto Ricans in New York City comprise a sizeable and relatively young community that has distinct needs and wants (as compared to other racial/ethnic groups) which it seeks to satisfy.

B. Chief Causes Of Death

It is useful to begin this statistical profile at the end of life. The mortality rate has always been an important social indicator differentiating groups. In New York City, mortality rates for Puerto Ricans are compiled only for those born in Puerto Rico; therefore, all mortality statistics should be considered with this limitation in mind.

Puerto Ricans in the period 1969-1971 had a much lower total mortality rate than whites or nonwhites. The rate for Puerto Ricans was 603.7 per 100,000. For all inhabitants of the city, the annual death rate in 1969-71 was 1112.1 per 100,000. This low death rate results from the

TABLE 1
Residence of Racial/Ethnic Groups by Borough, New York City, 1970

Racial/Ethnic Group	Bronx	Brooklyn	Manhattan	Queens	Staten Island	New York City
Puerto Rican						
Number	316,772	271,769	185,323	33,141	4,838	811,843
Percent	39.0	33.5	22.8	4.1	0.6	100.0
White						
Number	790,823	1,655,599	923,988	1,664,100	273,113	5,307,623
Percent	14.9	31.2	17.4	31.4	5.1	100.0
Black						
Number	337,806	638,175	364,722	256,357	15,515	1,612,575
Percent	20.9	39.6	22.6	15.9	1.0	100.0
Other						
Number	26,300	36,469	65,205	32,875	1,977	162,826
Percent	16.2	22.4	40.0	20.2	1.2	100.0
Total						
Number	1,471,701	2,602,012	1,539,238	1,986,473	295,443	7,894,867
Percent	18.6	33.0	19.5	25.2	3.7	100.0

Source: Constructed from U.S. Bureau of the Census (1970), New York State, Tables 34 and 129; and Community Council of Greater New York (1974), Tables 4a and 7. (A fuller reference for the source of this and subsequent tables is given in the selected bibliography at the end of the present report.)

TABLE 2

Percent Distribution of the Total and Puerto Rican Populations, by Age Groups, New York City, 1970

	Total Population		Puerto Rican Population			
			Birth		Parentage	
Age Group	Number	Percent	Number	Percent	Number	Percent
Under 15	1,875,966	23.8	58,308	12.5	252,390	73.0
15-44	3,232,688	40.9	298,686	64.1	87,886	25.4
45-64	1,833,290	23.2	88,547	19.0	4,344	1.3
65 and over	952,854	12.1	20,535	4.4	1,147	0.3
All ages	7,894,798	100.0	466,076	100.0	345,767	100.0

Source: Adapted from U.S. Bureau of the Census (1970), New York State, Tables 138 and 140.

fact that the Puerto Rican born group was much younger than the total population. When one controls for the age factor, other differences between these two groups become evident, as will be seen in subsequent tables.

An indication of the difference between the Puerto Rican group and all others may be seen among the eight leading causes of death for the total population, which have been ranked separately for the Puerto Rican born population (Table 3). The rank of "1" means that among the eight leading causes of death for the total population, that particular cause is the leading cause of death for the Puerto Rican born population.

Heart diseases and malignant neoplasms (cancers) are the first and second causes of death for all ages in both the Puerto Rican born and the total population, but the average annual rate for both of these diseases is considerably higher for the total population. A major reason for th differences in rates (as well as the differences in percentages) is the age structure. The Puerto Rican born group is concentrated in the age group 15 to 44, where death rates are low. On the other hand, only 4.4 percent of the Puerto Rican, but 12 percent of the total population were 65 and over in 1970. It is in this age group that death rates are highest. It shall also be seen, however, that on an age-specific basis the Puerto Rican born population 15 years old and above had significantly lower mortality rates for both malignant neoplasms and heart diseases. The former may stem from differential exposure to carcinogens and the latter to other environmental differences between the groups.

The third ranked cause of death in the Puerto Rican born population was cirrhosis of the liver, with an average annual rate of 45.4 per 100,000 population; this value is significantly above the average annual death rate of 36.5 per 100,000 in the city as a whole. For the total population, cirrhosis of the liver is the fifth ranked cause of death.

It should be noted that the method of ranking according to the leading causes of death for the total population has a distinct limitation. While homicide is not among the eight leading causes of death for the total population, among the Puerto Rican born group it is fourth in rank, but it does not appear in Table 3 at all. Similarly, in the 1969-1971 period, drug related deaths among Puerto Ricans were greater in number than three of the causes of death listed in Table 3 and yet drug dependence is not listed in the table. Homicide and drug dependence between them accounted for 10.3 percent of all deaths among the Puerto Rican born population in New York City at the beginning of the decade.

Although subject to the same limitation, age-specific studies of mortality rates provide a better perspective on the Puerto Rican born as compared to the total population.

TABLE 3

Average Annual Mortality Rates From Chief Causes For All Ages, Total and Puerto Rican Born Populations, New York City, 1969 - 1971

ALL AGES

Chief Causes[1]	Total Population			Puerto Rican Born Population			
	Number of Deaths	Average Annual Rate[2]	Percent	Number of Deaths	Average Annual Rate[2]	Percent	Rank
Heart diseases	104,286	440.2	39.6	2,131	152.4	25.3	1
Malignant neoplasms	53,314	225.1	20.2	1,320	94.4	15.6	2
Cerebrovascular disease	18,565	78.4	7.1	490	35.0	5.8	4
Influenza and pneumonia	10,529	44.5	4.0	287	20.5	3.4	6
Cirrhosis of the liver	8,650	36.5	3.3	635	45.4	7.5	3
Other diseases of digestive system	6,963	29.4	2.6	247	17.7	2.9	7
Accidents	6,588	27.8	2.5	409	29.3	4.9	5
Diabetes mellitus	6,028	25.4	2.3	247	17.7	2.9	7
All other	48,497	204.7	18.4	2,675	191.3	31.7	—
Total	263,420	1112.1	100.0	8,441	603.7	100.0	—

Source: Adapted from New York City, Department of Health (1971), Table 5.

[1] The eight leading causes of death are arranged in order of importance for the total population.

[2] Rates are per 100,000 population (1970 U.S. census totals for New York City).

1. Childhood

As may be seen in Table 4, among the youngest persons in the population, those under age 15, the death rate for Puerto Rican children is significantly higher than that for all children (79.5 versus 55.5 per 100,000). Accidents are the leading cause of death in both the total and the Puerto Rican born populations. Over one-fourth (28 percent) of all deaths for the Puerto Rican group in this age category are the result of accidents. Significantly, the average annual rate of death by accident (22.3 per 100,000 population) for the Puerto Rican born is almost double the rate for the total population.

Influenza and pneumonia are the third-ranked cause of death in the Puerto Rican born population under age 15, with an average annual rate of 8.0 per 100,000; this compares with a rate of 4.8 for the total population.

Homicide ranked fifth in total deaths in the Puerto Rican born population under age 15 and sixth in the city as a whole. Significantly, the homicide rate for Puerto Rican children (4.6 per 100,000) is 2.5 times that of the total population (1.8 per 100,000).

The number of deaths from other single causes among Puerto Rican children is too small to warrant separate discussion. The death rate attributable to all other causes, however, is significantly higher for Puerto Rican children than for all children (22.3 versus 15.2).

2. Adulthood

Ages 15 to 44 are the most productive years in life. Therefore, deaths in this age group can have a very important impact on the well-being of a people. For the Puerto Rican born population, homicide is the greatest killer, accounting for almost 20 percent of all deaths in this age group (Table 4). The average annual rate for the Puerto Rican born population (58.3 per 100,000) is more than twice the rate for the total population (28.5 per 100,000).

Drug dependence was the second greatest killer in the Puerto Rican born population; it was the cause of death in 12 percent of the cases. The average annual rate of 37.9 per 100,000 is considerably higher than the rate for the total population (23.2 per 100,000).

The third-ranked cause of death for the Puerto Rican born population was cirrhosis of the liver. Thirty of every 100,000 Puerto Ricans in the 15 to 44 age category died as a result of this ailment, which accounts for 10 percent of the total deaths. In the total population

TABLE 4

Average Annual Mortality Rates From Chief Causes For Ages Under 15 and 15-44, Total and Puerto Rican Born Populations, New York City, 1969-1971

	AGE UNDER 15						
	TOTAL POPULATION			PUERTO RICAN BORN POPULATION			
Chief Causes[1]	Number of Deaths	Average Annual Rate[2]	Percent	Number of Deaths	Average Annual Rate[2]	Percent	Rank
Accidents	704	12.5	22.5	39	22.3	28.0	1
Malignant neoplasms	570	10.1	18.2	18	10.3	13.0	2
Congenital anomalies	312	5.5	10.0	11	6.3	7.9	4
Influenza and pneumonia	272	4.8	8.7	14	8.0	10.1	3
Disease of nervous system	148	2.6	4.7	5	2.9	3.6	6
Homicides	104	1.8	3.3	8	4.6	5.8	5
Heart disease	59	1.0	1.9	2	1.1	1.4	8
Bronchitis, emphysema and asthma	50	1.0	1.6	3	1.7	2.2	7
Other diseases of digestive system	50	1.0	1.6	0	—	—	—
All other	856	15.2	27.5	39	22.3	28.0	—
Total	**3,125**	**55.5**	**100.0**	**139**	**79.5**	**100.0**	—
	AGE 15 - 44						
Malignant neoplasms	3,360	34.6	13.7	203	22.7	7.3	5
Homicides	2,766	28.5	11.3	522	58.3	18.9	1
Heart disease	2,592	26.7	10.5	193	21.5	7.0	6
Cirrhosis of the liver	2,386	24.6	9.7	268	30.0	9.7	3
Drug dependence	2,250	23.2	9.2	340	37.9	12.3	2
Accidents	1,715	17.7	7.0	223	24.9	8.1	4
Cerebrovascular disease	786	8.1	3.2	70	7.8	2.5	7
Other diseases of digestive system	708	7.3	2.9	64	7.1	2.3	8
All other	7,993	82.4	32.5	878	98.0	31.9	—
Total	**24,556**	**253.2**	**100.0**	**2,761**	**308.1**	**100.0**	—

Source: Adapted from New York City, Department of Health (1971).

[1] The eight leading causes of death in both age groups are arranged in order of importance for the total population.

[2] Rates are per 100,000 population by age group.

the average annual rate was 24.6 per 100,000.

Death as a result of accident occurred at a higher average annual rate in the Puerto Rican born population (24.9 per 100,000) than in the total population (17.7 per 100,000).

Finally, in this age category (15 to 44), deaths resulting from malignant neoplasm (cancer) and heart disease occurred at a lower rate in the Puerto Rican born population than in the population as a whole.

3. Middle and Old Age

Although heart diseases and malignant tumors were the leading killers in the 45 to 64 age category, the death rate for the total population was considerably higher than that for the Puerto Rican born (Table 5). The combined mortality rates for both of these diseases accounted for almost half the deaths in the Puerto Rican born population but over two-thirds of the deaths in the total population.

The third leading cause of death in the Puerto Rican born population, cirrhosis of the liver, accounted for a little over 11 percent of all deaths and for less than 7 percent in the total population. In the 45 to 64 age category, however, the average annual rate for the Puerto Rican born population (120.1 per 100,000) was considerably higher than the rate for the total population (84 per 100,000).

Less striking but still noteworthy differences exist in the death rates between the two groups in such causes of death as accidents and diabetes. Although the rates for these two causes are low (an average of 5 percent of the total causes of death for both populations), the death rates for the Puerto Rican born were greater than for the total population. Mortality due to accidents was at an average annual rate of 39.5 per 100,000 for the Puerto Rican born group, whereas the rate for the total population was 26.5. The difference in death rates resulting from diabetes was somewhat smaller, with the Puerto Rican born population having an average annual rate of 36.9, in contrast to a rate of 29.1 for the total population.

In the age category 65 and over, the death rates for the total population were generally higher than for the Puerto Rican born (Table 5). These differences may be attributed to the age structure of the Puerto Rican population, which is relatively younger, even within the category of persons over 65. Only the death rate for diabetes was higher among the Puerto Rican born than among the general population, with the former group having a rate of 201.3 compared to a rate of 144 for the total population.

TABLE 5

Average Annual Mortality Rates From Chief Causes For Ages 45-64 and 65+, Total and Puerto Rican Born Populations, New York City, 1969-1971

	AGE 45 - 64						
	TOTAL POPULATION			PUERTO RICAN BORN POPULATION			
Chief Causes[1]	Number of Deaths	Average Annual Rate[2]	Percent	Number of Deaths	Average Annual Rate[2]	Percent	Rank
Heart disease	25,618	465.8	36.6	807	303.8	28.7	1
Malignant neoplasms	19,855	361.0	28.3	597	224.7	21.2	2
Cirrhosis of the liver	4,615	84.0	6.6	319	120.1	11.3	3
Cerebrovascular disease	3,567	64.9	5.1	167	62.9	5.9	4
Other diseases of digestive system	1,966	35.7	2.8	93	35.0	3.3	7
Influenza and pneumonia	1,712	31.1	2.4	78	29.4	2.8	8
Diabetes mellitus	1,599	29.1	2.3	98	36.9	3.5	6
Accidents	1,459	26.5	2.1	105	39.5	3.7	5
All others	9,642	175.3	13.8	548	206.3	19.6	—
Total	70,033	1,273.3	100.0	2,812	1,058.6	100.0	—
	AGE 65 and OVER						
Heart disease	75,588	2,644.3	48.4	1,129	1,832.6	41.7	1
Malignant neoplasms	29,500	1,032.0	18.9	501	813.2	18.5	2
Cerebrovascular disease	14,163	495.5	9.1	253	410.7	9.3	3
Influenza and pneumonia	6,986	244.4	4.5	132	214.3	4.9	4
Other diseases of digestive system	4,135	144.7	2.6	90	146.1	3.3	6
Diabetes mellitus	4,115	144.0	2.6	124	201.3	4.6	5
General arteriosclerosis	3,385	118.4	2.2	68	110.4	2.5	7
Accidents	2,646	92.6	1.7	42	68.2	1.6	8
All others	15,644	547.3	10.0	367	595.7	13.6	—
Total	156,162	5,463.0	100.0	2,706	4,392.5	100.0	—

Source: Adapted from New York City, Department of Health (1971).

[1] The eight leading causes of death in each age group are arranged in order of importance for total population.

[2] Rates are per 100,000 U.S. 1970 census (New York City) population.

One final general observation should be made about the age-specific comparisons in chief causes of death between the total and Puerto Rican born populations. Within the four major age groups, the rankings of the eight leading causes of death as listed in Tables 4 and 5 for the two populations are rather similar in childhood, middle and old age. In the case of adulthood, however, a strong divergence occurs between Puerto Ricans and the total population—during the most productive years of the life cycle. The largest discrepancies in rank in this age group occur for cancer, heart disease, and drug dependence.

C. Maternal and Infant Mortality

Having considered the differences between the total population and the Puerto Rican born in terms of general death rates and chief causes, the maternal (puerperal) mortality rate among Puerto Rican born women is now compared with that of other racial/ethnic groups. It should first be noted that this rate can fluctuate sharply from year to year because of the small absolute number of deaths that actually occur in New York City for all groups. General trends are therefore the appropriate focus of analysis.

Maternal mortality has long been used as a gauge of health within a community. The medical-social history of a woman contributes to the degree of complications, if any, during pregnancy and childbirth. As indicated in Table 6, the Puerto Rican born maternal mortality rate for the period 1970-1976 was greater than that of whites (others), although not as high as for nonwhites (mostly blacks). For this period, the mean rate for Puerto Ricans was 3.9, which is more than double the 1.7 mean rate for whites (other) but lower than the mean mortality rate of 5.7 for nonwhites. For all groups combined, the mean for that period was 3.3 maternal deaths per 10,000 live births.

If one compares these rates with the average rates for the seven previous years (1963-1969), a judgment can be made about absolute and relative progress in the reduction of maternal mortality. For the Puerto Rican born mothers, the mean mortality rate for the years 1963-1969 was 6.0 per 10,000. This is in contrast to the rate of 11.5 for nonwhite mothers and of 2.6 for other (white) mothers. The decline in the average rate from the 1963-1969 period to the 1970-1976 period was 35 percent for both the Puerto Rican and other (white) groups and it was just over 50 percent for the nonwhite group.

For the entire 14-year period, the Puerto Rican maternal mortality rate has significantly declined at an average rate of 0.39 per 10,000 women per year. For the nonwhite community the maternal mortality

TABLE 6
Annual Maternal Mortality Rates per 10,000 Live Births, by Racial/Ethnic Group, New York City, 1963-1976

Year	Total Number of Live Births	Puerto Rican	Nonwhite	Other	Total
1963	167,848	10.2	11.8	4.1	6.9
1964	165,695	2.8	12.5	1.5	4.5
1965	158,815	9.8	12.5	3.1	6.5
1966	153,334	6.3	10.0	2.8	5.2
1967	145,802	4.2	11.7	2.5	5.2
1968	141,920	3.0	10.7	2.3	4.7
1969	146,221	5.8	11.6	1.9	5.3
1970	149,192	4.1	9.7	1.9	4.6
1971	131,920	6.7	3.6	1.3	2.8
1972	117,088	5.2	9.4	1.7	4.6
1973	110,639	5.3	4.8	1.8	3.3
1974	110,642	2.1	5.4	0.8	2.5
1975	109,418	0.0	4.4	1.6	2.4
1976	109,995	3.8	2.6	3.0	2.9

Source: New York City, Department of Health (1973), Table 6; and (1976), Table 15.

rate has decreased twice as fast, the average decline being 0.76 per 10,000 per year. On the other hand, during the 14-year period, although the percentage decline for others (whites) was as great as for Puerto Ricans, the average annual decrease was only 0.11 per 10,000 births. The improvement in maternal mortality has accompanied a steep decline in the total number of live births. It should also be added that in the period 1974-1976, not only was the maternal mortality rate among Puerto Rican women essentially equal to that of the other (white) group, but it was below what it had been for the latter group during the first three years of the 14-year period.

Just as the gap between the Puerto Rican maternal mortality rate and that of whites (others) has closed over the past 14 years, so has the gap in the infant mortality rates (Table 7). In 1963 and 1964 the death rate was 28 to 30 per 1,000 for infants of Puerto Rican parentage in New York City. This rate was 40 to 50 percent above the rate for whites (others) in that period (around 20 per 1,000). By the end of the period, in 1975-1976, infant mortality rates for the Puerto Rican group were essentially indistinguishable from the white group, being but 3 to 6 percent above the rates experienced by whites.

Again, as with the maternal mortality rates, it may be observed that the 1974-1976 Puerto Rican infant mortality rates were below those of whites 10 to 13 years earlier, a clear indication that progress has been made. On an average for the Puerto Rican group, the infant mortality rates declined by 1.40 per 1,000 per year. This is about the same rate experienced in the nonwhite community — a decline of 1.48 deaths per 1,000 infants per year. The rate of decline for both minority groups was far more rapid than it was for whites (others), which fell by only 0.3 deaths per 1,000 per year in the period.

TABLE 7
Annual Infant Mortality Rates per 1,000 Live Births, by Racial/Ethnic Group, New York City, 1963-1976

Year	Total Number of Live Births	Puerto Rican	Nonwhite	Other	Total
1963	167,848	28.2	39.2	19.9	25.8
1964	165,695	29.6	41.0	20.1	26.8
1965	158,815	26.7	39.4	19.4	25.7
1966	153,334	24.7	38.2	19.0	24.9
1967	145,802	24.3	36.2	18.2	23.9
1968	141,920	25.0	33.1	17.8	23.1
1969	146,221	23.0	34.0	19.8	24.4
1970	149,192	19.3	29.9	17.9	21.6
1971	131,920	19.7	27.4	17.6	20.9
1972	117,088	18.3	25.4	17.0	19.8
1973	110,639	19.5	23.9	17.7	19.9
1974	110,642	17.4	24.6	17.1	19.7
1975	109,418	17.7	23.7	16.6	19.3
1976	109,995	15.6	25.7	15.2	19.0

Source: New York City, Department of Health (1973), Table 6; and (1976), Table 15.

II. SELECTED HEALTH PROBLEMS

Of course, the health problems of Puerto Ricans in New York City are much more numerous than those revealed by an account of the leading causes of death in this population. Puerto Ricans not only die from other causes but also suffer certain forms of morbidity to a greater extent than other racial/ethnic groups, some of which result in death. Studies of these infirmities are infrequent and the data are often deficient. Space limitations permit analysis of only three health problems of importance to the Puerto Rican community: mental illness and retardation, drug abuse, and lead poisoning.

A. Mental Illness and Retardation

Data on mental illness and retardation by racial/ethnic group for New York City are available from records kept by the New York State Department of Mental Hygiene. The Department requires that an admission form be completed for any individual who receives a face-to-face interview during which his/her problems are discussed. The forms are filled out at all local community mental health and mental retardation facilities licensed or approved by the Department or funded in part by it through local mental health boards. These facilities include mental health centers, general hospital psychiatric units, outpatient clinics, and any other programs that are licensed, approved, or funded by the Department. Exempted from this particular requirement are inpatient or residential units of State and Licensed Mental Hospitals and Schools for the Retarded.

The form includes an item for the racial/ethnic group of the client, with separate codes for Puerto Ricans, blacks, whites, and others, and an "unknown" category referring to persons whose racial/ethnic background is not stated. The analysis to follow excludes admissions for the "other" category (4.1 percent of total admissions), and those for whom racial/ethnic group is not stated (16.3 percent of the total). The instructions for completing the forms specify that a person is considered Puerto Rican if he or a parent was born in Puerto Rico, thereby including both first and second generation Puerto Ricans. If a person is classified as Puerto Rican by these criteria, he is defined as such whether he is white or black. Racial/ethnic identification is determined on the basis of observation or the statement made by the patient or client.

The admission form also includes an item in which staff personnel are required to write in their initial or working psychiatric diagnosis or impression of the client at the time of interview. These impressions are coded in accordance with the standard diagnostic nomenclature of the American Psychiatric Association, which contains seven major categories from the International Classification of Disease, plus four additional categories for use in the United States only.

The basic cross-tabulation of psychiatric diagnosis by racial/ethnic group, presented in Table 8, indicates that for total admissions the rate per 100,000 population for both Puerto Ricans and blacks is approximately twice the comparable rate for whites. Puerto Rican and black admissions are roughly 2 percent and white admissions 1 percent of their respective populations. The data also show that the rates for whites are lower than for Puerto Ricans or blacks for every single one of the eleven diagnostic categories utilized.

When the two minority groups are compared, it is found that black admission rates exceed those of Puerto Ricans in the case of organic brain syndromes (including alcoholic psychoses), non-physical psychoses (especially schizophrenia), and personality and other non-psychotic mental disorders (including alcoholism). In each of the six remaining specific diagnostic categories, the rate of admission for Puerto Ricans is higher than for either of the other two racial/ethnic groups considered. These refer to mental retardation; psychophysiologic (including respiratory) disorders; special symptoms (such as speech disturbance); transient situational disturbances (adjustment reactions throughout the life cycle); behavior disorders of childhood and adolescence; and various kinds of social maladjustment without manifest psychiatric disorder.

This adds up to a devastating picture of mental illness and retardation experienced by blacks and Puerto Ricans in New York City, tempered thus far only by the likelihood that these two groups are much more apt to utilize the kinds of community mental health and retardation facilities at which these data are collected. Given their higher employment rate, better health insurance coverage, and superior income, whites with mental problems are more likely to visit physicians in private practice and utilize other kinds of facilities. (These points are discussed in Chapters III and IV.) The fact that 16 percent of all admissions were devoid of racial/ethnic data and therefore excluded from the table also contributes an unknown degree of distortion.

There are, however, some possible biases contained within the data actually analyzed that lead one to question the appropriateness and validity of the diagnoses made of Puerto Ricans by the overwhelmingly

TABLE 8

Number and Rate per 100,000 Population of Admissions to Community Mental Health and Mental Retardation Facilities, by Psychiatric Diagnosis and Racial/Ethnic Group, New York City, Fiscal Year 1973-1974

Psychiatric Diagnosis		Puerto Rican		Black		White	
		No.	Rate	No.	Rate	No.	Rate
I.	Mental retardation	696	85.7	860	53.3	1137	21.4
II.	Organic brain syndromes	667	82.2	1974	122.4	3462	65.2
III.	Non-physical psychoses	2659	327.5	6263	388.4	10524	198.3
IV.	Neuroses	1838	226.4	2382	147.7	6336	119.4
V.	Personality and other disorders	1931	237.9	4196	260.2	7392	139.3
VI.	Psychophysiologic disorders	47	5.8	51	3.2	113	2.1
VII.	Special symptoms	111	13.7	118	7.3	263	5.0
VIII.	Transient situational disturbances	1226	151.0	2074	128.6	2839	53.5
IX.	Behavior disorders of childhood and adolescence	510	62.8	982	60.9	686	13.0
X.	Psychiatric disorders	634	78.1	997	61.8	1782	33.6
XI.	Non-diagnostic terms	3992	491.7	7231	448.4	11238	211.7
Other		4122	507.7	6947	430.8	10909	205.5
Total		18433	2270.5	34075	2113.1	56681	1067.9

Source: Calculated from data made available by the New York City Department of Mental Health, Mental Retardation and Alcoholism Services based on MS-5 Admission Forms (Local Services) collected by the New York State Department of Mental Hygiene.

non-Puerto Rican staff of psychiatrists and others who interview them. (The racial/ethnic composition of the professional staff in public health facilities is reviewed in Chapter V.)

One of these possible biases is suggested in the data displayed in Table 9 regarding the five most common psychiatric diagnoses, which together account for approximately 80 percent of all diagnoses made of the clients who visit these facilities. Perhaps the most striking finding that emerges from these data is the high proportion of cases that fall into the last two categories, which comprise about 50 percent of the total over all three racial/ethnic groups. One of these categories, non-diagnostic terms, refers primarily to cases where the diagnosis was deferred, while the other denotes clients for whom no specific diagnosis could be made.

If the first three diagnostic categories (III - V) are compared with the last two (IX and other), an interesting and potentially important relationship appears. In the first three categories, which comprise the more definite diagnoses, one finds 52.3 percent of the whites, 47.5 percent of the blacks, and only 44.2 percent of the Puerto Ricans. Conversely, in the last two categories the order of the racial/ethnic groups is reversed: 55.8 percent of Puerto Ricans, 52.5 percent of blacks and 47.7 percent of whites. In short, it appears that the staff personnel who fill out the admissions forms in these mental health and retardation facilities have fewer problems in diagnosing whites than blacks and Puerto Ricans.

These results are presented in terms of the five most common psychiatric diagnoses, but it should be added that the conclusions are the same when all categories are considered. That is, the results (not exhibited here) are quite similar if a division is made between the first seven categories of the diagnostic nomenclature and the last four (all of which are listed in Table 8). It is of interest to note, further, that these last four categories have been added to the International Classification of Disease for use in the United States only.

In the case of Puerto Ricans, however, additional diagnostic distortions may appear even within the first seven categories of the classification, as indicated in the next two tables.

In Table 10 physical psychoses (a subcategory of organic brain syndromes) are contrasted with psychoses not attributed to physical conditions. Within the former group, the percentage of admissions for alcoholic psychosis among Puerto Ricans is less than that for both blacks and whites, although Puerto Ricans and whites have virtually the same admission rate for alcoholic psychosis — between 42 and 45 per 100,000 population. Among the non-physical psychoses, both Puerto Ricans and

TABLE 9

Number and Percent of Admissions to Community Mental Health and Mental Retardation Facilities For The Five Most Common Psychiatric Diagnoses, by Racial/Ethnic Group, New York City, Fiscal Year 1973-1974

Psychiatric Diagnosis	Puerto Rican		Black		White	
	No.	%	No.	%	No.	%
III. Non-physical psychoses	2659	18.3	6263	23.2	10524	22.7
IV. Neuroses	1838	12.6	2382	8.8	6336	13.7
V. Personality and other disorders	1931	13.3	4196	15.5	7392	15.9
XI. Non-diagnostic terms	3992	27.5	7231	26.8	11238	24.2
Other	4122	28.3	6947	25.7	10909	23.5
Total	14542	100.0	27019	100.0	46399	100.0

Source: Same as Table 8.

TABLE 10

Number and Percent of Admissions for Psychotic Organic Brain Syndrome and for Non-Physical Psychoses to Community Mental Health and Mental Retardation Facilities, by Type of Psychosis and Racial/Ethnic Group, New York City, Fiscal Year 1973-1974

	Puerto Rican		Black		White	
Type of Psychosis	**No.**	**%**	**No.**	**%**	**No.**	**%**
Psychotic Organic Brain Syndrome						
Senile	40	8.0	119	6.9	269	8.9
Alcoholic	344	68.7	1420	82.1	2375	78.2
Other cerebral	84	16.8	128	7.4	282	9.3
Other physical	33	6.6	63	3.6	110	3.6
Total	501	100.0	1730	100.0	3036	100.0
Ratio per 100,000 population	61.7		107.3		57.2	
Psychosis Not Attributed to Physical Conditions						
Schizophrenia	2371	89.2	5738	91.6	8110	77.1
Major affective disorders	129	4.9	142	2.3	1360	12.9
Paranoid states	26	1.0	120	1.9	248	2.4
Other psychosis	133	5.0	263	4.2	806	7.7
Total	2659	100.0	6263	100.0	10524	100.0
Ratio per 100,000 population	327.5		388.4		198.3	

Source: Same as Table 8.

blacks have a higher percentage of admissions for schizophrenia than whites.

Of greatest interest, however, are the ratios per 100,000 population for the racial/ethnic groups when the two types of psychoses are compared, that is, psychotic organic brain syndromes and psychoses not attributed to physical conditions. It would seem that diagnoses of the former, based on physical conditions, should be less affected by the particular culture of the diagnostician than the latter. When the ratios of these two types of psychoses are compared by racial/ethnic group, it is found that among whites the non-physical conditions are 3.5 times more likely to be diagnosed than the physical conditions (198.3 versus 57.2 per 100,000), and this factor is almost identical among blacks. By contrast, within the Puerto Rican group, admissions for psychoses not attributed to physical conditions are 5.3 times as great as admissions for physical psychoses (327.5 versus 61.7 per 100,000). (These differences among the racial/ethnic groups are due primarily to the manner in which alcoholic psychoses are diagnosed.) Consistent with the previous table, then, Puerto Ricans are more likely than the other two racial/ethnic groups to be coded into the more nebulous of two categories in the psychiatric classification scheme.

Additional hints of diagnostic distortion and possible bias are encountered when the data for mental retardation are reviewed (Table 11). Percentage comparisons indicate that Puerto Ricans are significantly more likely than blacks and whites to be labelled as severely or profoundly retarded. Some light may be shed on this finding by comparing the rates per 100,000 population for the three racial/ethnic groups. These data show that a diagnosis of mental retardation (of whatever degree) for Puerto Ricans is not only four times the rate for the white population but it is also 60 percent greater than the rate for blacks.

It is difficult to conceive of a systematic explanation of these figures and others presented in the discussion of mental illness and retardation that does not stress the economic, cultural and, especially, the linguistic differences between Puerto Ricans and the other two groups and contrast them with the characteristics of the staff personnel who diagnose the clients admitted to these facilities.

B. Drug Abuse

Drug abuse commonly refers, but is not limited, to the illegal use of narcotics; it may also include misuse of other illegal as well as legal stimulants, such as alcohol. This section concentrates exclusively on

TABLE 11

Number and Percent of Admissions for Mental Retardation to Community Mental Health and Mental Retardation Facilities, by Degree of Retardation and Racial/Ethnic Group, New York City, Fiscal Year 1973-1974

Degree of Retardation	Puerto Rican		Black		White	
	No.	%	No.	%	No.	%
Borderline	102	14.7	149	17.3	216	19.0
Mild	203	29.2	268	31.1	306	26.9
Moderate	204	29.3	257	29.9	342	30.1
Severe	110	15.8	109	12.7	144	12.7
Profound	42	6.0	21	2.4	46	4.0
Unspecified	35	5.0	56	6.5	83	7.3
TOTAL	696	100.0	860	100.0	1137	100.0
Rate per 100,000 population	85.7		53.3		21.4	

Source: Same as Table 8.

addiction to narcotics. It was noted above that deaths from drug dependence ranked just below accidents as the sixth leading cause of death among Puerto Ricans of all ages. As will be detailed in Chapter VI, Puerto Ricans in New York City consider drug abuse to be the most important health problem faced by their community. The relevant data, however, are not adequate to the level of this concern.

Since 1963, New York City has had a Narcotics Register to which suspected or known drug abusers are reported by various agencies, of which there are now about 500. The agencies include both private and public institutions that come in contact with narcotics addicts, with law enforcement and addiction treatment agencies accounting for about three-fourths of the reports to the register. The number of individuals for whom the Narcotics Register has received reports during a given time period is used as an indicator of the prevalence of narcotics addiction in the city. The fluctuation between years in the number of newly reported drug abusers is thought to mirror the rise and fall of the actual misuse of narcotics, but how well the mirror reflects is not known. In addition to its employment as an index of trends in the use of illegal narcotics, the Narcotics Register provides limited information on the individuals first reported to it, including identification of the racial/ethnic background of the alleged or confirmed drug abuser.

In both 1971 and 1972, there was a total of approximately 36,500 people identified by racial/ethnic origin who were first entered onto the Register (Table 12). This represents a rate of 461 to 463 per 100,000 population. In 1973 and 1974, the latest years for which data could be obtained, the number of newly reported cases dropped sharply to about 25,300 in each year, a rate of 320-321 per 100,000. There were far fewer blacks and whites reported to the Register in 1973 and 1974 than in the first two years, but this was not the case for Hispanics, whose rate was higher in 1974 than in the preceding two years. In 1974 Hispanics represented 23.1 percent of all new registrants from the three major racial/ethnic groups.

In each of the four years the black population had the highest recorded rate of newly reported addicts, followed by the Hispanic group and then by the whites. (The reports for the total number and rates exclude anyone not belonging to these three racial/ethnic groups.) It is not at all clear, however, that the Register's report of a person as "Hispanic" follows the U.S. census definition. This could greatly affect the reported rates for the Hispanic group and to a much lesser extent it would change the rates for both of the other groups. Whether or not one takes the Hispanic figure as the true rate for Puerto Ricans (who constitute about two-thirds of all Hispanics), it is clear that there is a

TABLE 12

Rates per 100,000 Population of Individuals First Reported to the New York City Narcotics Register, by Racial/Ethnic Group, 1971-1974

Year	Number of First Reports[1]	Hispanic[2]	Black	White	Total
1971	36,412	558	1171	209	461
1972	36,594	464	1072	263	463
1973	25,269	402	736	165	320
1974	25,317	508	773	132	321

Source: Constructed from New York City, Department of Health (1975), Table 2.

[1] Excludes about 15 percent of total cases in each year, for whom racial/ethnic group was not stated.

[2] Hispanic rates based on U.S. 1970 census total for persons of Spanish mother tongue in New York City.

vast gulf between the rates of the minority groups and those of the whites.

To the extent that addiction is a problem whose burden falls mainly on the young, one would expect that both blacks and Puerto Ricans would have somewhat higher overall rates of addiction than whites. This would be the case because the age structure of the two minority groups in New York City is quite different from that of the whites; as noted in Chapter I, the Puerto Rican population is especially young.

Age is reported for those entered on the Register (Table 13). Between 30 and 42 percent of those reported were under age 21, the percentages varying by year and racial/ethnic group. In 1971 and 1972 the proportion under 21 was highest among whites. In 1973 and 1974, the corresponding proportion among Hispanics on the Register increased to nearly the same values as among whites. In all four years blacks had the lowest proportion under 21 and the highest proportion in the age group 26 and over.

There appears to be a differential in the sources from which people are reported to the Register. It can be estimated from the MS-5 admission forms discussed in the preceding section of the present report that about 3 percent of the blacks, 5 percent of the Puerto Ricans, and 10 percent of the whites reported to the Register came from admission interviews at community mental health facilities, including hospital units, in 1973-1974. To the extent that the remainder of cases stem from law enforcement agencies, the more affluent white group also appears to be better able to avoid the stigma of apprehension by the law enforcement agencies than do members of minority groups.

One must avoid overinterpretation of the number of cases and of the characteristics of the people on the Register. Indeed, one cannot rely on the numbers themselves except in broad terms. This is true, first, because the numbers reported fluctuate with changes in the zeal, budget, and personnel of the law enforcement and addiction treatment agencies and the extent to which prosecution is carried out. Second, there is incomplete reporting by a number of agencies and non-reporting by a few agencies. Year-to-year variation in total numbers reported may also reflect the dates on which delayed reports are made. Third, the total numbers on the Register include some cases that do not involve narcotics abuse. Some 5 percent of first reports in 1974, entered on the Register, concerned people who were not narcotics abusers. Finally, racial/ethnic identification was not reported for about 15 percent of all new cases between 1971 and 1974.

In the early and middle 1970's, for which these data are applicable, narcotics abuse was a severe problem in New York City, especially

TABLE 13
Percent of Persons First Reported to the New York City Narcotics Register, by Racial/Ethnic and Age Groups, 1971-1974

Racial/Ethnic and Age Groups	1971	1972	1973	1974
Hispanics				
Under 21	31	34	41	37
21-25	34	31	30	31
26 and over	36	35	29	32
All ages	100	100	100	100
Number reported	6,415	5,339	4,625	5,843
Blacks				
Under 21	33	32	31	30
21-25	32	33	32	33
26 and over	35	35	37	37
All ages	100	100	100	100
Number reported	18,888	17,295	11,863	12,464
Whites				
Under 21	40	41	42	38
21-25	34	34	30	31
26 and over	27	25	28	31
All ages	100	100	100	100
Number reported	11,109	13,960	8,781	7,010

Source: Adapted from New York City, Department of Health (1975), Table 2.

among minority groups. Puerto Rican and black youth, who suffered high unemployment and other disadvantages, had high rates of drug addiction and, as noted in Chapter I, of death from narcotics abuse. As recorded in the rates derived from the Register, and from mortality data, blacks and Puerto Ricans suffered from drug addiction to a far greater extent than did the white community of New York City.

C. Lead Poisoning

Lead poisoning is a health problem that differentially afflicts the black and Puerto Rican communities in New York City. Although the association between paint and lead poisoning has been known since the 1920's, most lead poisoning cases went undetected until the 1960's. It was not until 1959 that the New York City Health Code banned the use of high content lead paint on interior surfaces.

About 450,000 apartments in New York City represent a hazard in terms of exposing children to the possibility of lead paint poisoning; approximately 120,000 children live in these dwellings. Due to the lack of interest in detecting and controlling lead poisoning until the late 1960's, however, only 143 cases and 39 deaths were reported from 1950 to 1955.

In January 1970, the New York City Health Department created the Bureau of Lead Poisoning Control. The Department initiated a large-scale community testing program that produced an enormous increase in the number of reported cases. While only about 10,000 blood tests had been taken in 1969, more than 80,000 were performed in 1970. The data on lead poisoning cases for selected years reflect the outcome of this massive campaign (Table 14). In 1969 only 727 cases were detected, while in 1970 the figure almost quadrupled to 2,649 cases. During 1971, approximately 10,000 blood tests were performed every month, but only 1,925 cases were detected. This represents an important decline from 1970, which suggests that progress was made through educational programs, community testing, medical treatment, and housing repair efforts.

The ratio of cases per 100,000 population for 1970 was 33.6 and for 1971 it declined to 24.4. Since lead poisoning is found primarily in children, especially those under the age of five, it is most appropriate to analyze the rates separately for this age group. The results yielded by this procedure are quite striking: for 1970 the rate in this youngest age group jumps to 430.2 and that for 1971 rises to 312.6.

TABLE 14
Lead Poisoning Cases in New York City for Selected Years

Years	No. of Cases	Ratio per 100,000 Population[1]
1950-55	143	—
1963	338	4.3
1969	727	9.2
1970	2,649	33.6
1971	1,925	24.4

Source: Constructed from data cited in articles by Guinee (1972a and 1972b).

Note: Data from 1950 through 1969 do not reflect actual occurrence because many cases went undetected.

[1] Based on 1970 U.S. census, except for 1963 ratio, which was based on 1960 census population.

Table 15 shows that for two age categories — under 5, and 5-19 — blacks have the highest proportion of lead poisoning cases, with Puerto Ricans following as the second group. Blacks represent 62.2 percent of all cases in children under the age of five while Puerto Ricans represent 21.7 percent of all cases in this age category. The rate of lead poisoning among black children under the age of five is 448.9 per 100,000 children, almost twice the rate for Puerto Rican children in this age group. For children aged 5 through 19, however, the rates drop sharply and the difference between black and Puerto Rican children disappears. In this age group the rate for black children is 30.2 and for Puerto Ricans it is 31.1. In terms of the percentage of cases represented by each racial/ethnic group, in the 5-19 age category blacks still lead with 51.8 percent of the cases while Puerto Ricans represent 29.6 percent of the cases.

For all black children under 20 years of age the rate of lead poisoning is 136.1; this figure is more than twice the rate for blacks in all age categories, which is 58.5. Among Puerto Ricans the rate of lead poisoning for all age categories is 44.8, which is also less than half the rate for Puerto Ricans under age 20.

TABLE 15
Lead Poisoning Cases in New York City, by Age and Racial/Ethnic Group, January 1 to September 30, 1971

Racial/Ethnic Group	Under 5 Years			5-19 Years			Total		
	No.	%	Ratio[1]	No.	%	Ratio[1]	No.	%	Ratio[1]
Black	787	62.2	448.9	156	51.8	30.2	943	60.2	136.1
Puerto Rican	275	21.7	261.4	89	29.6	31.1	364	23.2	93.0
Other[2]	54	4.3	—	8	2.7	—	62	4.0	—
Unknown[2]	149	11.8	—	48	15.9	—	197	12.6	—
Total	1265	100.0	205.4	301	100.0	16.1	1566	100.0	63.1

Source: Constructed from Guinee (1972b), Table IV.

[1] Per 100,000 population.

[2] Ratios were not calculated for the categories "other" and "unknown" because the population base for these categories could not be determined.

III. UTILIZATION OF HEALTH SERVICES

The area of health services utilization is illuminated by abundant data on the use of ambulatory care services and more limited information on inpatient services. The major study on which the ambulatory care data is based was conducted by Blue Cross-Blue Shield of Greater New York in June 1974. The sample consisted of 135 hospitals located in the 17 counties of the Southern New York Region. The hospitals were classified into three groups: municipal (public); voluntary (private, non-profit); and proprietary (private, profit-making). The former were all located in New York City. The data in this study are not otherwise specific to New York City, but the five counties (or boroughs) comprising the city accounted for about 60 percent of the total population in the 17-county region.

Analysis was carried out primarily by hospital control (voluntary or municipal) and type of visit (emergency room or outpatient department). For much of the data, the distinction of hospital control was eliminated in the present report, but the division by type of visit was retained throughout. Information concerning 18 proprietary hospitals has been excluded from some of the tables because they represent only a small percentage of cases.

In the Blue Cross-Blue Shield study all data were obtained from patient charts except identification of racial/ethnic group and income. The former was arrived at by observation and by surname; family income for 1973 was obtained by asking the patient or relatives. The Hispanic racial/ethnic category included Puerto Ricans, Latin Americans, and Spaniards, who were largely identified by surname or from records wherever available. Blue Cross-Blue Shield indicated in a personal communication that Puerto Ricans represented 80 percent of the Hispanics.

The study has two acknowledged limitations of some importance. The first is the fact that the Blue Cross-Blue Shield study of outpatients was based on a one-day sample and may therefore overrepresent the frequent or multiple clinic utilizers. All data refer to the number of patient visits and not to the number of patients. Thus, a single person using both the eye and allergy clinics in the same day would appear twice in the tabulations. The second limitation is the ambiguity of the self-pay category. Out-of-pocket expenses could vary from $0.50 to $50. One cannot determine whether those visits classified as self-pay represent visits in which the patient paid an important part of the total charges or only a nominal fee.

It should first be noted that while the white (non-Hispanic) population comprises two-thirds of the population of New York City and an even larger fraction of the 17-county study area, this majority group accounted for only 31.8 percent of all outpatient visits in the study (Table 16). Hispanics made 28.8 percent of all visits and blacks 36.9 percent. The relative overutilization of outpatient departments by both the Hispanic and black communities can perhaps be traced to the lack of qualified physicians in the areas in which they live and to the concentration of medical services for the poor in the municipal hospital system of New York City. The shortage of qualified physicians in private practice in low-income areas will be addressed in Chapter IV. Utilization of outpatient facilities is the present subject of analysis.

TABLE 16
Percent of Visits to Outpatient Departments by Racial/Ethnic Group Members Within Hospital Type, Southern New York Region, 1974

Racial/Ethnic Group	Voluntary	Municipal	All Hospitals
White	39.8	23.3	31.8
Black	34.4	40.1	36.9
Hispanic	24.2	34.5	28.8
Other	2.6	2.3	2.5
TOTAL	**100.0**	**100.0**	**100.0**

Source: Adapted from Blue Cross-Blue Shield (1975), Appendix Tables II, III, and IV.

A. Characteristics of Ambulatory Care Visits

The racial/ethnic distribution of visits to outpatient departments shows that a greater proportion of Hispanics go to municipal hospitals than to voluntary hospitals (Table 17). In fact, of all the groups, Hispanics have the greatest proportion of visits to municipal hospitals (53 percent as compared to 49 percent for blacks and 33 percent for whites). This may reflect the greater concentration of Hispanics in the city as such, when compared with the other racial/ethnic groups.

Use of emergency rooms by members of various racial/ethnic groups is strikingly different from the utilization of outpatient facilities (Table 18). Whites accounted for 46 percent of all emergency visits (compared

TABLE 17
Percent of Visits to Outpatient Departments, by Racial/Ethnic Group and Hospital Control, Southern New York Region, 1974

Racial/Ethnic Group	Voluntary	Municipal	All Hospitals	
White	67.4	32.6	100	(3656)
Black	51.5	48.5	100	(4240)
Hispanic	46.5	53.4	100	(3310)
Other	58.4	41.5	100	(284)
TOTAL	**55.3**	**44.6**	**100**	**(11,490)**

Source: Same as Table 16.

TABLE 18
Percent of Visits to Emergency Rooms by Racial/Ethnic Group Members Within Hospital Type, Southern New York Region, 1974

Racial/Ethnic Group	Voluntary	Municipal	All Hospitals
White	56.7	21.0	45.8
Black	27.3	51.9	34.5
Hispanic	14.9	26.5	18.6
Other	1.2	0.7	1.0
TOTAL	**100.0**	**100.0**	**100.0**

Source: Same as Table 16.

to only 32 percent of outpatient visits), displacing blacks in the first rank. Blacks made 35 percent of all emergency visits, almost double the 19 percent rate of Hispanics. New York City municipal hospitals totalled about half of all emergency visits by both Hispanics and blacks, and for both groups they were somewhat more frequent than emergency visits made to voluntary hospitals. An overwhelming majority of emergency visits made by whites was to the voluntary rather than to the municipal hospitals.

The utilization of emergency-room care in the Southern New York hospital region more nearly reflects the racial/ethnic composition of the region than does the outpatient care (Table 19). Nevertheless, both the black and Hispanic groups are relatively overrepresented in the emergency rooms, although less so than in the outpatient facilities. In

making emergency visits, whites relied much more heavily on voluntary hospitals than on municipal hospitals. The people of the ghettos and the barrios, with their disproportionate concentration in New York City, utilized the city's municipal hospitals to a far greater degree.

Table 19
Percent of Visits to Emergency Rooms, by Racial/Ethnic Group and Hospital Control, Southern New York Region, 1974

Racial/Ethnic Group	Voluntary	Municipal	All Hospitals	
White	72.3	15.7	100	(1807)
Black	46.2	51.5	100	(1361)
Hispanic	46.9	52.6	100	(732)
Other	67.5	22.5	100	(40)
TOTAL	58.5	34.3	100	(3940)

Source: Same as Table 16.

Note: Percentages do not add up to 100; the difference corresponds to proprietary hospitals. This category was excluded because the total number of visits to these hospitals was 282, which represents only 7.1 percent of the total visits to all hospitals.

The notable disparity in racial/ethnic composition between people receiving outpatient hospital care and those using emergency care is accentuated by income differentials.

In the 1974 Blue Cross study, just under 40 percent of Hispanics and blacks with outpatient visits were on welfare, while about 18 percent of white outpatient visits were made by welfare recipients (Table 20). Whites using hospital outpatient facilities were economically better off than the Hispanic or black groups, although 51 percent of whites either were on welfare or had an income below $4,000. If a value of zero is assumed for the earned income of persons on welfare, median income for Hispanics and blacks was about $2,000, while that of whites was around $3,850. The proportion of white outpatient visitors with income above $8,000 (22 percent) was double that of Hispanic patients (11 percent) and half again as high as that of black outpatients (15 percent).

Comparisons between groups may be affected by the broadness of the categories used and by the fact that a considerable proportion (26 percent) of the patients did not report their income at all. Nevertheless, it seems evident that Hispanics and blacks using outpatient facilities had similar incomes, with about 60 percent either on welfare or earning

TABLE 20
Percent Distribution of Racial/Ethnic Groups by Income in Outpatient Departments for All Hospitals, Southern New York Region, 1974

Income	White	Black	Hispanic	Other	Total
Welfare	18.4	39.6	38.9	19.6	32.4
Under $4,000	32.9	22.6	20.3	23.4	25.2
$4,000-$7,999	27.0	22.9	29.8	32.6	26.4
$8,000 and over	21.7	14.8	10.9	24.4	16.0
All income groups	100.0	100.0	100.0	100.0	100.0
Total no. of visits	2,666	3,282	2,468	184	8,600
Median income	$3,854	$1,840	$2,187	$4,859	$2,793

Source: Adapted from Blue Cross-Blue Shield (1975), Appendix Table VIII.
Note: Income information was not available for 3053 visits, or 26.2 percent of the total. For Hispanics income information was missing for 887 visits, or 26.4 percent of the total.

less than $4,000. Outpatients belonging to both these groups tended to have lower incomes than white patients.

The income of Hispanics and blacks using emergency rooms was not appreciably different from those using outpatient facilities (Table 21). Once again, for both groups, about 60 percent of emergency-room patients were either on welfare or had incomes below $4,000. There is an apparent drop in the median income of the Hispanic group as compared to outpatient Hispanics, but this reflects the much smaller number of patients in emergency rooms and the much larger proportions that did not provide income information — about 38 percent of Hispanics and 45 percent of all users of emergency services.

The income of whites visiting emergency-room facilities is strikingly different from that of whites utilizing outpatient services. Instead of 22 percent with income over $8,000, more than half (53 percent) of the white emergency-room patients had incomes above $8,000. The proportion with income under $4,000 or on welfare was only 28.5, whereas among outpatients it was 51.3. It is evident that the white group using emergency services is substantially different from the group using outpatient services.

In summary, Tables 20 and 21 indicate that the income distribution of Hispanics and blacks using emergency rooms is not much different from those using outpatient services, although there is an apparent change in the median income of both groups. Whites using emergency services had much higher incomes than whites visiting outpatient facilities. This undoubtedly is a consequence of the way in which emergency services are used. The fact that the racial/ethnic composition of patients in the emergency rooms is much nearer to the composition of the general population indicates that to a large extent the emergency rooms serve all who are in need of care. By contrast, outpatient hospital facilities are clearly used most heavily by those with low income, and in the New York area in the 1970's, that tends to mean by Hispanics and blacks.

B. Methods of Payment and Clinics Utilized

Some important findings are revealed by the data on methods of payment for visits to outpatient departments and emergency rooms (Tables 22 and 23). If these data are examined in conjunction with the previous tables on income distribution, some very striking results emerge.

TABLE 21
Percent Distribution of Racial/Ethnic Groups by Income in Emergency Rooms For All Hospitals, Southern New York Region, 1974

Income	White	Black	Hispanic	Total
Welfare	13.4	40.5	45.4	30.1
Under $4,000	15.1	17.0	15.5	15.8
$4,000 - $7,999	18.4	23.7	27.7	22.4
$8,000 and over	53.1	18.8	11.4	31.7
All income groups	100.0	100.0	100.0	100.0
Total no. of visits	912	840	458	2,234
Median income	$8,000+	$2,235	$1,187	$4,732

Source: Adapted from Blue Cross-Blue Shield (1975), Appendix Table VII.
Note: A total of 24 visits by "other" groups is not included. Income information was not available for 1800 emergency visits, or 44.6 percent of all visits.

TABLE 22
Percent Distribution of Racial/Ethnic Groups by Method of Payment for Outpatient Departments, All Hospitals, Southern New York Region, 1974

Method of Payment	White	Black	Hispanic	Total
Medicaid	24.8	44.3	43.8	37.3
Self-pay	36.0	30.5	40.0	35.6
Medicare	25.4	10.5	5.8	13.9
Blue Cross	4.1	4.1	3.3	3.8
Other	9.7	10.5	7.0	9.3
Total no. of visits	3622	4200	3292	11,394

Source: Adapted from Blue Cross-Blue Shield (1975), Appendix Table VIII.

In both types of visits, Medicare is used considerably more by whites than by either blacks or Hispanics. This is determined primarily by the age structure of each racial/ethnic group. That is, Medicare is assistance given to the aged; because the proportion of elderly persons is greater among whites than within the other groups, it follows that the use of Medicare by whites should be greater than its use by other groups.

TABLE 23
Percent Distribution of Racial/Ethnic Groups by Method of Payment For Emergency Rooms, All Hospitals, Southern New York Region, 1974

Method of Payment	White	Black	Hispanic	Total
Medicaid	12.6	41.6	40.6	27.8
Self-pay	19.9	32.8	36.5	27.6
Medicare	8.9	3.0	4.2	5.9
Blue Cross	34.1	10.4	6.5	20.6
Other	24.5	12.2	12.2	18.1
Total no. of visits	1804	1345	737	3926

Source: Adapted from Blue Cross–Blue Shield (1975), Appendix VIII.

Medicaid is used primarily by blacks and slightly less by Hispanics, while less than a quarter of the whites rely on this method of payment. The percentage difference for blacks and Hispanics using Medicaid in both types of visits is very slight; however, among whites, the proportion using Medicaid in emergency rooms was 12 percent less than the proportion paying through Medicaid in outpatient departments. This reflects the income distribution of whites, previously discussed, inasmuch as a lower percentage of those using emergency rooms were on welfare or earned under $4,000.

Blue Cross utilization shows the most drastic differences between visits to emergency rooms and to outpatient departments. About twice as many blacks and Hispanics in emergency rooms use Blue Cross as those visiting outpatient departments. For whites, the difference is more startling: 4 percent use Blue Cross in outpatient departments, while 34 percent use Blue Cross in emergency rooms. The exact explanation for this variation is not known, but in part it must be the result of the unequal distributions of income between the two types of visits. Because Blue Cross is a private insurance plan, it is a more characteristic method of payment for higher than for lower income groups.

Among visitors to outpatient departments, 22 percent of whites earned $8,000 and over. In contradistinction to this, 53 percent of whites using emergency rooms were in this income range. Therefore, for whites, one can expect to find a greater proportion of Blue Cross users in emergency rooms than in outpatient departments. For blacks and Hispanics the same explanation could be given, although the differences between those earning $8,000 and over in the two types of visits are very small.

Concerning Hispanics, the most important method of payment to be examined is self-pay. Of all their visits to outpatient departments, 40 percent were characterized by self-pay, and of all their visits to emergency rooms, 37 percent used the self-pay method. Although in both cases Hispanics utilized Medicaid slightly more than self-pay, this should have been higher considering the relatively large proportion of Hispanics who are on welfare or earn under $4,000. Of all three racial/ethnic groups, the Hispanics contain the highest proportion using the self-pay method in both categories of visits. In emergency rooms there is a 17 percentage point difference between whites and Hispanics using self-pay; for outpatient department visits this disparity is considerably reduced, but a significant difference of 10 percentage points emerges between blacks and Hispanics.

Although the fee for a visit may be as low as $0.50, when it is recalled that Hispanics had the lowest proportion of patients with incomes of $8,000 and over, it is important to determine why the Hispanics constitute the highest proportion in the self-pay category of methods of payment. Perhaps lack of information about public assistance available to low-income families is one of the main factors explaining why such a large proportion of Hispanics pay out of their own pockets for the health care services they receive. Another factor might be that Hispanics do not meet all the qualifications required by Medicaid and Medicare, as well as those required by private health insurance programs such as Blue Cross-Blue Shield. Or perhaps they think they would not qualify and tend to apply less for these programs than other groups. All of these variables would have to be examined before reaching a complete and correct explanation.

The visits to outpatient departments were also classified by the specialty of the clinic used. The largest percentage of visits by all groups was to general medicine, with pediatrics a close second (Table 24). In terms of the distribution of visits by clinic, significant distinctions emerged between the three major racial/ethnic groups. The two clinics used most often by whites were general medicine and eye, while the two most frequently utilized by blacks were general medicine and pediatrics. The distribution of visits by blacks to other clinics was similar to those for whites and Hispanics, with the exception of general surgery and gynecology, which they tended to use more than the other groups, and the ear, nose and throat clinic, which they used less than the other groups.

The clinic most frequented by Hispanics was pediatrics, with 20 percent of their visits to this department. The proportion of Hispanic visits to pediatrics represented the heaviest usage of a particular clinic

by any group. The second most utilized service by Hispanics was obstetrics, with 12 percent of the visits to clinics by this group. Following this was general medicine, which accounted for 11 percent of the visits, although Hispanics used it much less than either of the other two groups. Finally, they tended to visit the walk-in and/or screen clinic to a greater extent than either whites or blacks.

TABLE 24
Percent Distribution of Visits to Clinics by Racial/Ethnic Groups, All Hospitals, Southern New York Region, 1974

Clinics	White	Black	Hispanic
General medicine and family practice	18.3	15.9	10.9
Walk-in and/or screen	5.6	6.9	8.6
Allergy	7.6	4.4	5.5
Dermatology	5.5	4.3	4.3
General surgery	6.0	8.8	6.6
Orthopedic	6.0	4.3	3.8
Ear, nose, throat	6.1	2.8	4.7
Eye	11.2	7.6	6.1
Obstetrics	3.5	8.8	11.6
Gynecology	3.9	8.5	6.7
Pediatrics	8.7	15.8	20.1
Psychiatric	7.0	4.0	3.8
Other medical specialty	10.5	7.9	7.3
Total percent	100.0	100.0	100.0
Total no. of visits	3,712	4,298	3,355

Source: Constructed from Blue Cross-Blue Shield (1975), Appendix Table XVII.
Note: The racial/ethnic category "other" (with 288 visits) is not shown.

C. Inpatient Care

In December 1975 Blue Cross conducted a midnight census of inpatients in hospitals throughout New York State. Tabulations are available for the same 17-county area that was used in the outpatient and emergency-room study, including a breakdown for New York City. The inpatient census, like the other study, shows the very heavy reliance of both the black and the Hispanic communities on the municipal hospitals of New York City. Blacks constituted 46 percent of the patients while Hispanics comprised 18 percent (Table 25).

Hispanic representation in the municipal inpatient census (18.3 percent) is far below that previously found in Table 16 for municipal

TABLE 25

Percent Distribution of Inpatients, by Racial/Ethnic Group and Hospital Control, New York City, 1975

Racial/Ethnic Group	Major Teaching Hospitals	Other Voluntary Hospitals	Proprietary Hospitals	Municipal Hospitals	All Hospitals
White	74.1	82.3	87.3	34.3	73.5
Black	17.4	12.9	9.3	45.9	18.7
Hispanic	7.4	4.0	3.2	18.3	6.9
Other	1.1	0.8	0.1	1.4	0.9
TOTAL	100.0	100.0	100.0	100.0	100.0

Source: Blue Cross (1976), Table 8.

outpatient departments (34.5 percent) and well below that found in Table 18 for municipal emergency rooms (26.5 percent). One reason for this may be the refusal of two of the municipal hospitals to participate in the midnight census. If Hispanics were a larger proportion of patients at these two facilities, the figures for the remaining hospitals would clearly be biased. The racial/ethnic composition of the inpatients in teaching hospitals (all but one of which are in New York City) far more closely resembles the city's racial/ethnic distribution than does that found in the municipal hospital system. The teaching hospitals, nevertheless, have more whites and fewer blacks and Hispanics than would be expected on the basis of their population.

IV. PHYSICIANS IN PRIVATE PRACTICE

In considering the availability of health services, the most important point to determine is the number and type of resources available to the community. This requires information on hospitals, clinics, ambulatory care units, and storefront community health programs, as well as data on doctors, nurses, visiting nurses, and other personnel servicing a particular community. Most of the available data do not relate facilities, services, or personnel to the racial/ethnic composition of the community served and therefore are not useful for the present study of Puerto Ricans. In this chapter the available relevant materials on physicians in private practice are considered; the following chapter discusses information on physicians and other health personnel serving in the public sector.

The Health and Hospital Planning Council of Southern New York conducted a study in October 1967 on physicians' staff appointments, the results of which were published in 1974. This study includes a variety of breakdowns of physicians per 100,000 population; it also contains a distribution of physicians by the income level of the area in which they practice as well as the number and rate of physicians in each health area by their primary specialty.

Although the study does not contain specific data on Puerto Ricans, it is possible to compare the rates of physicians in each health area with the health areas in which 6,000 or more Puerto Ricans live and thereby obtain a fairly accurate picture of the availability of physicians in the Puerto Rican communities.

A more recent study on the distribution of physicians in New York City was conducted by the Office of Biostatistics of the New York City Department of Health in July 1975, with findings published in December 1977. This study includes a distribution of physicians by health area as well as 1975 estimates of the population for each health area and borough. The data permit comparisons of the availability and distribution of physicians for two time points: 1967 and 1975. The 1975 study does not include a racial/ethnic distribution, which is necessary to determine the ratio of physicians in predominantly Puerto Rican areas; therefore, other sources were sought for these data. Unfortunately, estimates of the population in 1975 by racial/ethnic group are available only by borough and cannot be calculated for the health areas. This has limited the range of comparisons the present report can make between the 1967 and 1975 findings.

Concerning the use of the physician/population ratio, the Health and Hospital Planning Council points out in its study that it is not necessarily the best nor most relevant measure, for the following reasons: First, it is a substitute for services, as the real object one would want to measure is the availability or accessibility of physician's services per unit of target population. Second, the demand for services from populations of equal size may be dissimilar; demand depends on such variables as age and sex, as well as on a number of social, economic, occupational, and cultural factors. Third, a tendency exists to establish optimum balances between health personnel and population that are usually based on those prevailing among favored population groups. Lastly, a satisfactory definition of what is optimal does not exist and therefore efforts to discern the optimum balance have not been successful. These limitations in the use of professional/population ratios do not preclude their use as measures of shortages or as instruments in policy formulation regarding manpower recruitment, training, and utilization.

It must also be pointed out that both these studies refer only to physicians in private practice. They do not include the availability of physicians without a private practice, such as interns, residents, and others, who constitute about a third of all physicians in New York City.

A. Availability of Physicians

The table on physicians per 100,000 population by primary interest (specialty) and borough shows that in New York City the highest rate encountered is 400, which occurs in Manhattan (Table 26). For all health areas and physicians, the lowest rates are found in the boroughs of the Bronx and Staten Island. Dividing the physicians by their primary interest shows the differential rates among the specialties. General practice is the most prevalent of the primary interests for all health areas in every borough except Manhattan. Psychiatry/neurology exhibits the lowest rates in every borough except Manhattan. Pediatrics and obstetrics/gynecology consistently show relatively low rates in every borough.

Since pediatrics and obstetrics/gynecology were previously shown to be the clinics most often used by Hispanics, it is appropriate to examine in more detail the rates for these specialties. The highest rates in both specialties are found in Manhattan, with 13.4 pediatricians and 25.1 obstetricians/gynecologists per 100,000 people. The lowest rates in both specialties are found in the Bronx, which has a rate of 4.9 pediatricians

TABLE 26

Physicians in Private Practice per 100,000 Population, by Primary Interest, Health Area and Borough, New York City, 1967[1]

Health Area	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology	Psychiatry/ Neurology	General Practice	Other	All Physicians
BRONX								
Puerto Rican areas[2]	7.3	7.3	1.3	3.2	1.0	35.4	2.1	57.6
All health areas	17.5	15.9	4.9	5.6	3.7	43.0	5.2	95.8
BROOKLYN								
Puerto Rican areas	3.6	6.6	1.0	2.6	0.0	26.1	1.3	41.3
All health areas	22.2	23.1	7.2	9.1	5.3	40.3	6.3	116.6
MANHATTAN								
Puerto Rican areas	12.3	9.4	4.7	5.2	25.5	11.3	27.8	96.3
All health areas	92.9	89.2	13.4	25.1	86.6	65.1	25.4	399.9
QUEENS[3]								
All health areas	20.0	17.9	8.9	7.5	5.0	39.3	9.7	108.5
STATEN ISLAND[3]								
All health areas	16.2	18.9	6.8	7.8	3.0	21.3	8.1	82.2
NEW YORK CITY								
Puerto Rican areas	7.2	7.5	1.8	3.4	5.3	28.4	6.7	60.5
All health areas	34.3	33.2	8.4	11.1	20.7	44.7	10.8	164.8

Source: Calculated from Health and Hospital Planning Council of Southern New York (1974b), Appendix C, Tables C-1 and C-2; and Community Council of Greater New York (1974), Appendix D.

[1] 1970 census population figures were used as the base for calculating physicians' rates

[2] Puerto Rican areas refer to health areas with 6,000 or more Puerto Ricans.

[3] There are no Puerto Rican health areas in Queens or Staten Island.

and 5.6 obstetricians/gynecologists. These data suggest that there is a shortage of pediatricians and obstetricians/gynecologists in private practice serving the Puerto Rican community, not only because these specialties are less prevalent than others but also because the demand for them by the Puerto Rican community is greater than their demand for other specialties.

For Puerto Rican areas the shortage of physicians is even more critical. In the case of pediatrics, the lowest average rate in Puerto Rican areas is 1.0 for Brooklyn while the highest is 4.7 for Puerto Rican areas in Manhattan. The latter is about one-third the rate of pediatricians for Manhattan (13.4). This situation improves slightly in the case of obstetricians and gynecologists, whose average rates in the Puerto Rican areas are between 2.6 and 5.2 per 100,000. The rate of these specialists for Manhattan as a whole (25.1), however, is five times greater than the highest rate found in Puerto Rican areas of that borough. For other specialties it can be observed that in most cases the rates for Puerto Rican areas are less than half the rates for all health areas. The largest difference is found in Manhattan, where the rates for internal medicine and surgery are seven and nine times greater, respectively, than the comparable rates for the Puerto Rican areas.

Queens and Staten Island, however, are probably more reasonable standards of comparison and models for emulation. Manhattan is a special case, with perhaps the highest ratio of physicians to population in the world, exacerbated by a concentration of hospital locations. When these distortions are controlled by excluding Manhattan, it may be seen that the rates in Puerto Rican areas of the Bronx and Brooklyn are less than half of those in all health areas of Queens and Staten Island for all primary interests except general practice.

Table 27 shows the rates of physicians in predominantly Puerto Rican, black, and white areas, where predominance is determined by 50 percent or more of the population belonging to one of these groups. (In the previous table, Puerto Rican areas were defined as those health areas with 6,000 or more Puerto Ricans.) At first glance, it is surprising to find that the rate of physicians for predominantly Puerto Rican areas in Manhattan and Brooklyn is higher than the rate of physicians in health areas with 6,000 or more Puerto Ricans for these same boroughs. Based on the data and analyses presented thus far in this report, one might expect that physicians' rates would be lower in areas with the greatest concentration of Puerto Ricans than in areas where Puerto Ricans constitute less than 50 percent of the health area's population.

The high rate in Manhattan can be explained by the fact that in the only two health areas where Puerto Ricans constitute 50 percent or more of the population, two hospitals are located: Mount Sinai and

TABLE 27
Physicians in Private Practice per 100,000 Population in Predominantly Puerto Rican, Black and White Health Areas, by Borough, New York City, 1967

Borough	Puerto Rican	Black	White
Manhattan	138.1	71.2	603.0
Bronx	35.5	29.1	104.0
Brooklyn	46.2	64.1	139.5
Queens	—	41.5	119.1
Staten Island	—	—	82.2
New York City	52.6	57.0	206.8

Source: Same as Table 26.
Note: Area is considered predominantly Puerto Rican, black or white if 50 percent or more of the total health area population belongs to one of these groups. Where no group represented 50 percent or more of the population, the area was excluded.

Flower/Fifth Avenue. Physicians with private practices and hospital appointments tend to have their offices in close proximity to, if not within, the hospital with which they are affiliated. Similarly, for the Bronx, the lower rate of physicians in predominantly Puerto Rican areas than in areas with 6,000 or more Puerto Ricans can be explained, perhaps, by the fact that in the ten health areas where Puerto Ricans constitute 50 percent or more of the population only one hospital is located: Lincoln Hospital. If the New York City rate for predominantly Puerto Rican areas (52.6) is compared to the New York City rate for health areas with 6,000 or more Puerto Ricans given in the previous table (60.5), it is evident that for predominantly Puerto Rican areas as a whole, the rate of physicians is lower than for all health areas with large Puerto Rican populations.

In Table 27 it can be observed that the rate of physicians in predominantly white areas is at least twice the rate found in predominantly Puerto Rican or black areas in every borough for which comparable data exist. The availability of physicians in predominantly black areas of the Bronx and Manhattan is even lower than the availability of physicians for predominantly Puerto Rican areas; however, this does not hold true in Brooklyn.

In order to understand better the significance of the rates in predominantly white areas, it is necessary to compare them with the rates given in Table 26. By looking at the rates of all physicians for borough totals ("all health areas") it can be appreciated that they are much lower than the rates for predominantly white areas. This shows

that when boroughs are classified by race and ethnicity, the rates obtained for predominantly white non-Hispanic areas are even higher than the total rates for boroughs. Of course, rates higher than these exist in individual health areas; as will be seen in Table 29, the rate climbs above 4,000 in one health area of Manhattan.

Table 28 shows the percentage of private physicians whose practice is located in Puerto Rican areas. The significance of this table lies in the finding that in every borough Puerto Rican areas are getting less than their share of physicians relative to their population. That is, in virtually every case, the percentage of physicians for each specialty falls below the percentage represented by the population in Puerto Rican health areas. The only exception occurs in Manhattan, where the percentage of "other" specialties (15.1) is higher than the percentage of population in Puerto Rican health areas (13.8).

TABLE 28

Percent of Physicians in Private Practice in Health Areas With 6,000 or More Puerto Ricans, by Primary Interest and Borough, and Percent of Population Living in These Areas, New York City, 1967

Primary Interest	Bronx	Brooklyn	Manhattan	New York City[1]
Internal Medicine	17.4	1.9	1.8	3.6
Surgery	19.2	3.3	1.5	3.8
Pediatrics	11.1	1.6	4.8	4.5
Obstetrics/gynecology	24.4	3.4	2.8	5.5
Psychiatry/neurology	11.1	0.0	4.1	3.9
General practice	34.4	7.5	2.4	11.9
Other	16.8	2.4	15.1	12.0
Percent of Population in Puerto Rican Areas	**41.9**	**11.6**	**13.8**	**20.1**

Source: Same as Table 26.

[1] This includes all health areas with 6,000 or more Puerto Ricans in the Bronx, Brooklyn and Manhattan. Queens and Staten Island do not have any health areas with 6,000 or more Puerto Ricans.

For the Bronx and Brooklyn the greatest shortages exist in pediatrics and psychiatry/neurology. The Puerto Rican areas of the Bronx are being served by only 11.1 percent of the available physicians in these specialties while the population in their areas constitutes 41.9 percent of the total population in the Bronx. Similarly, in Brooklyn the Puerto Rican areas have only 1.6 percent of the available pediatricians and none of the psychiatrists or neurologists, while they would be

entitled to an 11.6 percent share according to their corresponding share of the population. Although in the Puerto Rican areas of Manhattan the specialties of pediatrics and psychiatry/neurology do not exhibit the lowest percentages, they are nevertheless receiving less than half their share of 13.8 percent of the relevant population in Manhattan. Bearing in mind that the population in the Puerto Rican health areas in New York City represents 20.1 percent of the total population of all health areas, it can be noted that for almost every primary interest (except general practice and "other") the Puerto Rican areas are receiving less than one-third their share of available physicians.

Table 29 exhibits the rates of physicians per 100,000 population in 1967 and 1975. For all categories, and in all boroughs, there is an apparent increase in the rate of physicians from 1967 to 1975. The figures, however, are not comparable because the definition of private physicians used in 1967 differs from the definition used in 1975. The 1967 data exclude interns and residents while the 1975 data include an undetermined percentage of these physicians.

Table 29 captures the vast range that exists between the average rate of different health areas at the borough level and citywide, which extends from 3.7 to 4,023.5 in 1967, and from 4.0 to 4,750.0 in 1975. The most significant observation that can be made from this table is that, as in 1967, the rates in 1975 (regardless of the definition of private physicians used) for Puerto Rican areas within boroughs are in most cases still less than half the rates for all health areas; only slight deviations occur in the Bronx for 1967 and in Brooklyn for 1975. Parallel to the discussion of Table 26 for 1967, when the distorting effects of Manhattan are excluded, the rates of physicians per 100,000 population in Puerto Rican areas of the Bronx and Brooklyn in 1975 still tended to be less than half of those in Queens and Staten Island for the latter year. Inasmuch as the patterns observed are quite similar for both 1967 and 1975, these data suggest that there was no improvement in the relatively poor standing of Puerto Rican areas over the eight-year period, despite any changes in physician or population totals.

The study conducted by the Health and Hospital Planning Council of Southern New York also presented rates by the median income (socio-economic) level of the census tract in which the physician's office was located, with the level usually divided into five or ten ranks. Since the majority of the Puerto Rican population in New York City lives in low-income areas, it may safely be assumed that the conditions found in these areas would affect the Puerto Rican community. The tables in the following section present data in terms of the income ranks of census tracts. These tables are concerned with the quality of the physicians practicing in different areas of the city in 1967.

TABLE 29
Physicians in Private Practice per 100,000 Population, by Health Area, Borough and Year, New York City, 1967 and 1975

	Manhattan		Bronx		Brooklyn		Queens[5]		Staten Island[5]		New York City	
Health Areas	1967	1975[4]	1967	1975	1967	1975	1967	1975	1967	1975	1967	1975
Puerto Rican areas[1]	96.3	254.7	57.6	66.4	41.3	75.3	—	—	—	—	60.5	101.8
All health areas[2]	399.9	630.8	95.8	149.9	116.6	145.4	108.5	155.0	82.2	147.2	164.8	235.3
Area with lowest rate[3]	5.1	10.0	6.4	10.0	3.7	4.0	7.4	12.0	13.6	41.6	3.7	4.0
Area with highest rate	4,023.5	4,750.0	319.9	2,750.0	861.8	880.1	622.1	796.9	280.6	382.1	4,023.5	4,750.0

Source: Calculated from Health and Hospital Planning Council of Southern New York (1974b), Appendix C, Tables C-1 and C-2; Community Council of Greater New York (1974), Appendix D; and New York City Department of Health (1977).

[1] Puerto Rican areas include all health areas with 6,000 or more Puerto Ricans.
[2] All health areas equal borough total and include Puerto Rican health areas.
[3] Areas with lowest rate might or might not be Puerto Rican areas.
[4] For 1975, Puerto Rican areas used are based on the 1970 racial/ethnic distribution by health areas; the 1975 distribution is not available. Although there have been population changes in terms of total numbers, it is assumed that 1970 Puerto Rican areas were still largely Puerto Rican in 1975.
[5] Queens and Staten Island do not have any Puerto Rican health areas.

B. Quality of Physicians

The availability and accessibility of health care services is clearly important in determining the medical treatment received by Puerto Ricans. Just as important, however, is an assessment of the quality of services being dispensed. The present report deals only with data on physicians in private practice, with three indicators used to appraise their quality: age, membership in professional societies, and hospital appointments.

Age can be used as an indicator of quality in the sense that there can be established an optimal age range in which there is a balance between practical knowledge (acquired through experience) and theoretical knowledge (acquired through education and study). Very young physicians (those under 30) have had very little practical experience and may still be in training for their specialty. Very old physicians have had a lot of practical experience but may not be up to date on new knowledge and research and therefore may be employing outdated techniques and treatments. To exacerbate the situation, older physicians still in practice are characterized by lessened productivity; for example, they tend to reduce their hours of work and thereby contribute to attrition of services.

The study conducted by the Health and Hospital Planning Council gives the average age for the physicians in private practice in New York City as 54 years, while in the Bronx and Brooklyn the average age approaches 56 years. While the study does not directly discuss the effect of age on the quality of physicians, it is concerned with the effect of age on the attrition rate of physicians in certain areas. The study mentions that boroughs with disproportionate numbers of older physicians are at a great disadvantage in their ability to retain physicians primarily because of their loss due to retirement or death. It is pointed out that in the Bronx and Brooklyn about one-fourth of the physicians are 65 years of age or older; this creates a critical problem of attrition within the profession. Just to maintain the physician rates at current levels, these areas must succeed in drawing disproportionately on the new members of the profession. Yet, as stated by the study, the probability of attracting sufficient numbers of new physicians is not high, one of the reasons being that many physicians have moved outward from the central cities.

The situation is even worse among general practitioners; 30 percent of this group are 65 years of age or older, with very little recruitment taking place. While among all physicians 6 percent are in the 30 to 34 age group, only 2 percent of the general practitioners are in this age group.

An examination of the percentage distribution of physicians by age and by income level of office location (Table 30) shows that the largest proportion of physicians under the age of 30 are located in the lowest income rank (1.8 percent, as compared to 0.8 percent for ranks 5-7 and 1.1 percent for ranks 8-10). This percentage difference seems minor, but a largerdifference is observed in the 65 and over age category. In each of the two lowest income ranks about 28 percent of the physicians are in this category, while only 20 percent of physicians in the three highest ranks are found in this age category.

The other two indicators of physician's quality to be discussed are membership in professional societies and hospital appointments. The importance of membership in professional organizations is that it allows the physician to keep abreast of new developments within his field, to become acquainted with new treatments and medications, and to gain knowledge of current research. It can be assumed that the quality of treatment given by physicians who are members of these organizations will be higher than the quality of treatment given by physicians who do not belong to any professional organization.

The indicator of membership in professional societies shows that the quality of health service is poorer in the lower income than in the higher income areas (Table 31). In the lowest income area, 51 percent of physicians had no membership in any professional society. This contrasts with 33 percent of all physicians in the three highest ranking areas who had no membership. The proportions of physicians with membership in one organization were also lowest in the two lowest income areas. Further significant differences exist in the distribution of physicians who are members of two, three, or more associations. In the lowest income area, 13 percent of the physicians belong to the "two memberships" category, while within the three highest ranking areas, 20 percent of the physicians are in this category. The last group considered is those physicians who are members of three or more professional organizations. In the lowest income area, 7 percent of the physicians fall into this group, while in the three highest income census tracts, 14 percent of the physicians are associated with three or more professional organizations.

The most striking comparison in this table is that 51 percent of all physicians in the lowest income area do not belong to any professional society at all, while 14 percent of the physicians in the three highest income areas are members of three or more professional organizations.

Hospital appointments of physicians in private practice can be used as another indicator of quality of physician care. As pointed out in the report, for physicians without hospital privileges or appointments the opportunities to associate with professional colleagues were limited, not

TABLE 30

Percent Distribution of Physicians in Private Practice, by Age and by Income Level of Census Tract of Office,[1] New York City,[2] 1967

Census Tract Level	Total	Under 30	30-34	35-44	45-54	55-64	65 and over
All physicians	12,689	1.2	5.6	19.6	19.4	29.9	24.3
Rank 1 (Low)	884	1.8	6.3	16.1	18.3	29.3	28.2
Rank 2	1,405	1.6	6.5	19.4	16.8	26.8	28.9
Rank 3-4	2,447	1.2	4.9	18.2	17.0	31.0	27.7
Rank 5-7	3,253	0.8	4.6	15.6	19.2	34.6	25.2
Rank 8-10 (High)	4,700	1.1	6.3	23.9	21.7	27.1	19.9

Source: Health and Hospital Planning Council of Southern New York (1974b), Table B-4, p. 92.

[1] Median income, 1960 U.S. census.

[2] Excluding 321 physicians with offices in census tracts without significant numbers of residents.

TABLE 31

Percent Distribution of Physicians in Private Practice, by Number of Memberships in Professional Societies and Income Level of Census Tract of Office,[1] New York City,[2] 1967

Census tract level	Total	No Membership	One Membership	Two Memberships	3 or More Memb.
All physicians	12,689	37.9	32.1	18.5	11.5
Rank 1 (Low)	884	51.4	28.3	13.2	7.1
Rank 2	1,405	43.5	28.3	17.2	11.0
Rank 3-4	2,447	39.4	31.8	18.7	10.1
Rank 5-7	3,253	37.4	33.9	17.7	11.0
Rank 8-10 (High)	4,700	33.3	32.8	20.2	13.7

Source: Health and Hospital Planning Council of Southern New York (1974b), Table B-21, p. 100.

[1] Median income, 1960 U.S. census.
[2] Excluding 321 physicians with offices in census tracts without significant numbers of residents.

only within the framework of hospital organization but outside as well. These physicians frequently conduct isolated office practices without the stimulus of regular professional association. Such isolation, the report states, will inevitably erode professional competence and to this extent will place patients in jeopardy.

The data presented show the percentages of physicians in private practice without hospital appointments, by specialty and by income rank of office location (Table 32). The table indicates that the lowest income area has the highest proportion of physicians without appointments, 26 percent, as compared to 14 percent without appointments for the highest income area.

Although the differences are not of such magnitude within the specialties, the same pattern is observed in each of them: a higher proportion of physicians without appointments is found in the lower than in the higher income areas. Focusing on two specialties that are of major significance for the Puerto Rican community, pediatrics and obstetrics/gynecology, it can be observed that 19 percent of pediatricians in the lowest income rank have no appointments but only 9 percent of those in the richest rank have no appointments. Among obstetricians/gynecologists, 17 percent of those practicing in the lowest income rank have no appointments while only 4 percent of those practicing in the highest income rank do not have hospital appointments.

TABLE 32

Percent of Physicians in Private Practice Without Appointments, by Primary Interest and by Income Level of Census Tract of Office, New York City, 1967

Census Tract Level	PRIMARY INTEREST							
	All Physicians	Internal Medicine	Surgery	Pediatrics	Obstetrics/ Gynecology	Psychiatry/ Neurology	Other Specialty	General Practice
Rank 1 (Lowest)	25.5	9.2	9.2	19.4	16.7	36.8	20.9	39.6
Rank 2	23.6	12.3	10.3	12.1	4.8	42.5	21.3	35.9
Rank 3	16.4	9.6	8.1	12.3	5.4	30.1	20.2	22.0
Rank 4	13.4	8.6	6.8	11.7	6.3	30.1	19.0	18.3
Rank 5 (Highest)	13.5	5.9	5.4	9.0	4.4	31.0	16.7	19.8
TOTAL	2,027	214	182	74	48	527	154	825

Source: Health and Hospital Planning Council of Southern New York (1974b), Table 4-5, p. 46.
Note: In New York City there were 18,150 physicians, of whom 13,010, or 72 percent, were in private practice in 1967.

V. PUBLIC HEALTH MANPOWER RESOURCES

As long as pronounced differences in cultural background, language and social class persist between providers and receivers of health services, the quality of the medical care received must suffer, if for no other reasons than the delays and misunderstandings inherent in the situation. In this chapter an attempt is made to document the extent to which Puerto Ricans participate in the public health care sector as providers of services in New York City. More particularly, an attempt is made to assess the extent to which Puerto Ricans provide professional, technical, and administrative services as well as lower level services within the health sector.

A. Total Employment

The first data exhibited come from the New York City Department of Hospitals, which conducted a racial/ethnic census of its employees in 1969. The census results were presented only by total percentage of employees in each institution and not by occupational classification, so that laborers are indistinguishable from radiologists, orderlies from surgeons. Nevertheless, one can use the data as a benchmark against which to measure future progress.

The results, given in Table 33, are quite striking. First, it should be noted that the proportion of employees classified as Puerto Rican (9.7 percent) is very close to that of the Puerto Rican population found in the 1970 U.S. census for New York City as a whole. The hospitals with more than 20 percent of their staff composed of Puerto Rican employees (Lincoln, Metropolitan and Morrisania) are hospitals that serve heavily Puerto Rican areas. Hospitals with very low proportions of Puerto Rican employees, such as Queens General and Seaview, tend to be distant from Puerto Rican residential areas.

As soon as one considers the remaining racial/ethnic groups in the Department, however, one recognizes that Puerto Rican employment proportionate to population size was little more than an accident. On the whole, an absolute majority (56 percent) of all Hospital Department positions were held by blacks, although blacks were only about one-fifth of the city's population in 1969. Of the 18 hospitals involved in the census, 13 were found to have a majority of black employees and an additional three had a plurality of black employees. Whites and other racial/ethnic groups constituted the majority of employees at only one institution and held a bare plurality over blacks at a second; Puerto Ricans were nowhere the dominant racial/ethnic group.

TABLE 33
Percent Distribution of Employees of New York City Municipal Hospitals, by Hospital and Racial/Ethnic Group, 1969

Hospital	Total Employees	Black	Puerto Rican	Other
Bellevue	5288	48.3	11.5	40.1
S. Coler	1708	64.9	18.5	16.5
Bronx Municipal	3389	44.4	9.7	45.7
City	1665	50.3	7.3	41.7
Coney Island	1274	46.2	8.2	44.0
Cumberland	908	71.9	11.0	17.0
Fordham	836	51.0	13.1	35.7
Francis Delafield	634	61.3	13.2	25.3
Goldwater	1768	67.9	13.4	18.6
Greenpoint	542	56.6	13.2	30.4
Harlem	2340	92.4	3.6	3.9
Kings County	5800	55.4	1.8	42.7
Lincoln	1148	63.5	20.1	16.3
Metropolitan	2446	49.1	20.7	30.1
Morrisania	945	57.9	21.6	20.3
Queens General	2458	60.9	2.9	36.1
Seaview	1187	36.7	1.4	61.8
Sydenham	696	69.9	4.4	25.5
Hospital Totals	**35,022**	**56.6**	**9.5**	**33.7**
Central Services	**1,413**	**35.1**	**13.7**	**51.1**
Grand Total	**36,435**	**55.8**	**9.7**	**34.4**

Source: Layzer (1970).

At the level of central services the staffing pattern more nearly reflected the city's racial/ethnic composition, but even here whites, holding a bare majority of the positions, were underrepresented, while blacks, holding 35 percent of the jobs, were strongly overrepresented.

More detailed occupational statistics by racial/ethnic group are available from a census conducted by the Health and Hospitals Corporation and published by the Commission on Human Rights of the City of New York. The data refer to 1971 and are limited to employees of the city government; although the report deals with public sector employment, it does not encompass the state or federal governments. Despite these limitations, the report stands as one of the best available on the question of minority employment.

The study shows the relationship between racial/ethnic groups and job titles for the 40,646 employees of the Health and Hospitals Corporation in 1971. This total is roughly 10 percent greater than that reported in Table 33 for 1969. Overall, there were only minor changes in the racial/ethnic composition of the employees. The 1971 data show 10.2

percent of employees to be Puerto Rican instead of the 9.7 percent in 1969. The proportion of employees who were black fell slightly to 54.2 percent, but as the total number of positions was larger in 1971 than in 1969, there was no loss in the number of positions held by blacks.

B. Distribution by Occupation

As already noted, when all positions are considered, the Puerto Rican community was represented exactly in accordance with the U.S. census count, 10.2 percent. Very low percentages of Puerto Ricans were found, however, in the better paying, prestigious, and policy-making positions, broadly labelled as officials/administrators and professionals, which include job titles such as directors of nursing, head nurses, nurses, and physicians (Table 34). Puerto Ricans comprised only 2 percent of the professional employees, the lowest rate of any racial/ethnic group, including "others" and "other Spanish-surnamed." There were virtually no Puerto Ricans holding the job titles of inspector or investigator, and only a handful of Puerto Ricans (4 percent) held craftsmen positions.

Substantial representation of Puerto Ricans was confined to two occupational groups. These were operatives (laundry workers, exterminators, vehicle and machine operators), 23 percent of whom were Puerto Rican, and paraprofessionals (27 percent). The latter was the only occupation with a higher percentage of Puerto Rican workers than whites, but the departmental report lists a total of only 68 paraprofessionals. In effect, then, operatives were the only occupation with noteworthy Puerto Rican employment (400). The percentages of Puerto Ricans in all other occupational categories ranged between 9 and 16.

Whites formed about 63 percent of the general population of the city but held only 31 percent of all positions in the Health and Hospitals Corporation. They were dominant in two occupational categories: inspectors and investigators (76 percent) and craftsmen. The latter occupation has traditionally barred minority workers from its ranks and apparently still follows this practice, since the overwhelming majority of craftsmen (84 percent) are white. At the administrative and professional levels, whites held a bare majority of the posts. Their participation in other occupational positions was very low relative to the population size of the group. Whites constituted large minorities in four other occupational titles: 46 percent of the 195 positions classified as laborers, 38 percent of the major occupational category of clerical workers, 35 percent of the large number of operatives, and 33 percent of the technical workers.

TABLE 34
Percent Distribution of Racial/Ethnic Groups by Occupation in the New York City Health and Hospitals Corporation, 1971

Occupation	Black	Puerto Rican	(Spanish-Surnamed)[1]	White	Other[2]	Total No.
Officials/administrators	41	4	(5)	52	3	2,307
Professionals	28	2	(5)	52	14	8,695
Technical workers	53	9	(12)	33	2	599
Inspectors/investigators	21	1	(2)	76	1	672
Protective service workers	59	16	(18)	24	0	691
Paraprofessionals	62	27	(27)	12	0	68
Clerical workers	52	9	(10)	38	1	6,106
Craftsmen	11	4	(5)	84	*	537
Operatives	42	23	(23)	35	*	1,774
Service workers	72	13	(15)	13	1	19,002
Laborers	43	12	(12)	46	0	195
Total	54	10	(12)	31	4	40,646

Source: Adapted from New York City Commission on Human Rights (1973), Appendix II, p. 79.

[1] Includes Puerto Ricans.
[2] "Other" includes Chinese and other unspecified minorities.
*Less than 0.5 percent.

In 1971, blacks, who comprised one-fifth of the city's population, held 54 percent of all positions in the Health and Hospitals Corporation. Relative to their majority position as employees of the corporation, blacks were noticeably absent from the rank of craftsmen (constituting only 11 percent of the total); they were also weakly represented among professionals (28 percent) and inspectors and investigators (21 percent). It must be stressed, however, that in the last two fields blacks were at or above their population proportions, and they were predominant among service workers (72 percent) and paraprofessionals (62 percent).

The single most important statistic about "other" ethnic groups is that, with a very small population base, they nevertheless constituted 14 percent of the entire professional staff of the Health and Hospitals Corporation. In large part this reflected the use by the Corporation of foreign nationals, trained abroad, for intern and resident professional positions.

Having analyzed the status of the Puerto Rican worker in the Health and Hospitals Corporation relative to other groups, it is instructive to compare these figures with those combining Puerto Ricans and other Hispanics in the vague category of "Spanish-surnamed" (given in parentheses in Table 34).

It must first be noted that the term "Spanish-surnamed" (which is still in use by many agencies) is virtually lacking in any merit. More than 30 percent of Puerto Ricans do not have Spanish surnames, and the same is true of many other Hispanics, while a large proportion of Filipinos do have Spanish surnames. Most relevant in the present context, the inclusion of Puerto Ricans as part of a "Spanish-surnamed" category distorts the data on health manpower. The adding of "other Spanish-surnamed" to the "Puerto Rican" category misleadingly inflates the figures (especially in the higher prestige occupations).

For example, in the occupational classification labelled officials/administrators, if the two categories ("Puerto Ricans" and "Other Spanish-surnamed") are combined, the figure becomes 5 percent for the total Spanish-surnamed category. Although this percentage is considerably below the rate for blacks and whites, it nevertheless represents a one-fourth increase in the Spanish-surnamed category over the Puerto Rican category when considered alone.

Another relatively high increase occurs when the two Hispanic categories are combined for the professional job designation. Here the increase results in a 5 percent total for the conglomerate category of Spanish-surnamed. Again, this figure is minute compared to the other racial/ethnic groups, but it is 2.5 times the percentage for Puerto Ricans when considered by themselves. Of all job categories, professionals is the only one in which other Spanish-surnamed persons have a greater

proportion of the jobs than Puerto Ricans. This is a fact worthy of notice because of all occupational categories it is precisely the professionals (including doctors, nurses, and social workers) who hold the most prestigious jobs within the Health and Hospitals Corporation. Of the 470 Spanish-surnamed professionals only 203, or 43.2 percent, are Puerto Ricans. Given the fact that for all occupational categories combined, Puerto Ricans represent 84 percent of the jobs held by the Spanish-surnamed group, the scarcity of Puerto Rican professionals becomes quite clear. This shortage of bilingual and bicultural professionals is especially severe when one considers the demand for public health services by Puerto Rican patients, as will be seen in the following chapter. The deficit is barely affected by the addition of other Hispanic professionals and clients.

In the other job categories there is some increase when the two Hispanic groups are combined, but the proportional increase is much less than for those already discussed. It is evident, therefore, that the high-prestige and/or high-income occupations have a greater increase compared to the low-prestige and/or low-income job classifications when the broader of the Hispanic terms is used. This is done in subsequent reporting by the Health and Hospitals Corporation, thereby presumably distorting the nature of the employment of Puerto Ricans.

C. Recent Trends

Table 35 presents the latest available figures on manpower in the Health and Hospitals Corporation. If one compares the percentage distribution for all employees in Table 34 with the yearly percentages in the present table, there is no indication that any progress has been achieved by Puerto Ricans since 1971. The strong recommendation contained in the 1973 report of the New York City Human Rights Commission urging more equitable employment of Puerto Ricans has apparently not been followed. There was a small increase of two points in the percentage distribution of Spanish-surnamed employees between 1971 and 1974, while the other racial/ethnic groups fell slightly over this period.

When compared to Table 34, the data in Table 35 indicate that there was an increase of almost 5,000 in the total number of empioyees in the Health and Hospitals Corporation between 1971 and 1974, followed by a loss of more than 7,000 employees between 1974 and 1977. In the latter period the percentage of each racial/ethnic group changed slightly (less than 4 points for any group), but some trends are evident even over such a short time. The distribution of blacks shows a steady

TABLE 35

Percent Distribution of Full-Time Employees in the New York City Health and Hospitals Corporation, by Racial/Ethnic Group and Year

Year	Black	Spanish-Surnamed or Hispanic[1]	White	Other[2]	Total
1974	53.0	14.0	29.2	3.8	45,346
1975	53.3	14.3	28.5	3.9	45,702
1976	55.1	14.0	27.5	3.4	40,468
1977	55.8	13.8	26.0	4.4	38,260

Source: Calculated from employment data provided by the Office of Equal Opportunity, New York City Health and Hospitals Corporation.

[1] In 1974 and 1975 the category "Spanish-surnamed" was used; in 1976 and 1977 the category "Hispanic" was employed.
[2] Includes Asian-Americans, American Indians, and unspecified others.

upward trend with a small cumulative increase of almost three percentage points. Conversely, the distribution of whites has experienced a steady downward trend of 3.2 points between 1974 and 1977. The "Spanish-surnamed or Hispanic" group has remained constant, representing 14 percent of the employed during the four-year period. The terminology for this group has been changed several times, however, and it is uncertain whether the same population was counted under each new label or whether different definitions were used. Thus, in 1971 two separate groups were counted: "Puerto Rican" and "other Spanish-surnamed." By 1974 these two groups had been merged into one category, "Spanish-surnamed." This label was maintained in 1975, but in the following two years the term "Hispanic" was used.

Table 36 provides a breakdown of the racial/ethnic distribution of employees by occupation between 1974 and 1977. (These data cannot be compared with the 1971 job titles because of changes in the occupational classification at some unknown point between 1971 and 1974.) This breakdown shows the changes that took place in the racial/ethnic distribution of some occupations, which cannot be appreciated in Table 35, dealing with the percentage distribution of all employees. The most striking finding is that, with the exception of the skilled craft category, the trends indicated in the previous table are duplicated within each occupational category for every racial/ethnic group, although the magnitude of the changes differs. The 1974 data for skilled crafts seem to be in error and could not be corrected before the present report went to press.

Leaving aside the skilled craft occupation, it can be observed that blacks have experienced a slight upward trend in the proportion they represent within every occupational category. The increases between 1974 and 1977 for blacks range between 2 and 6 percent, with the latter occurring in the office/clerical category. For whites also, the same trend observed in the previous table is reproduced within each occupational category; that is, a small but steady decline occurs in each job classification, with the exception of protective service. Although the proportion of whites in protective service increased by 3 percent between 1974 and 1975, it declined in the following two years, so that in 1977 the figure was the same as in 1974 (20 percent).

The "Spanish-surnamed or Hispanic" group had smaller changes than the groups previously discussed and did not exhibit a clear downward or upward trend. Thus, while the proportion of "Spanish-surnamed or Hispanics" increased slightly in the categories officials/administrators, technicians, and service/maintenance, it fell slightly in the protective service and paraprofessional job titles. The proportion of "Spanish-surnamed or Hispanics" in professional and office/clerical

occupations essentially remained constant during the four-year period.

Those employees classified in the "other" racial/ethnic group (the definition of which may also have changed relative to 1971) experienced no change in their proportion within each occupation, with the exception of the professional category. Professionals declined by 2 percent between 1975 and 1976, but increased by 3 percent the following year.

TABLE 36

Percent Distribution of Racial/Ethnic Groups by Occupation of Full-Time Employees in the New York City Health and Hospitals Corporation, Fiscal Years 1974-1977

Occupation	Year	Black	Spanish-Surnamed or Hispanic[1]	White	Other[2]	Total No.
Officials/administrators	1974	27	6	66	2	1,075
	1975	29	6	63	2	1,003
	1976	31	7	60	2	780
	1977	31	8	59	2	769
Professionals	1974	35	6	48	12	11,813
	1975	35	6	48	12	12,007
	1976	38	6	47	10	10,894
	1977	39	6	43	13	10,915
Technicians	1974	78	7	13	2	3,719
	1975	76	9	13	2	4,083
	1976	78	9	11	1	3,660
	1977	80	9	10	2	3,252
Protective service	1974	59	20	20	*	1,059
	1975	58	19	23	*	1,127
	1976	60	18	22	*	961
	1977	63	18	20	*	908

Paraprofessionals	1974	77	14	8	1	10,604
	1975	76	14	8	1	10,960
	1976	79	13	7	1	9,303
	1977	80	13	7	1	8,560
Office/clerical	1974	49	15	34	1	8,715
	1975	51	16	32	1	8,836
	1976	53	16	31	1	7,492
	1977	55	15	29	1	7,134
Skilled craft	1974	30	11	58	1	1,643
	1975	14	6	79	1	1,312
	1976	14	6	80	1	1,235
	1977	14	7	78	1	1,150
Service/maintenance	1974	46	31	22	1	6,718
	1975	47	33	18	1	6,374
	1976	50	33	16	1	6,142
	1977	51	34	15	1	5,552

Source: Calculated from employment data provided by the Office of Equal Opportunity, New York City Health and Hospitals Corporation.

[1] In 1974 and 1975 the category "Spanish-surnamed" was used; in 1976 and 1977 the category "Hispanic" was employed.
[2] Includes Asian-Americans, American Indians, and unspecified others.
*Indicates less than one-half of 1 percent.

VI. ATTITUDES TOWARD HEALTH AND HEALTH SERVICES

This chapter reviews some of the available materials on the attitudes of Puerto Ricans toward health and health services in New York City. The data are taken from three limited studies, the only ones located after an extensive search that were relevant to the subject of health attitudes. One study was aimed specifically at Puerto Ricans; the other two analyzed some of their data by racial/ethnic group.

The studies and their populations are as follows: "What Holds Sami Back?," a study of service delivery in a Puerto Rican community of Manhattan's Lower East Side, published by Valle Consultants in 1973. A total of 213 Puerto Rican families were interviewed for this study. Of these, 98 percent of the mothers and 96 percent of the fathers were born in Puerto Rico.

The second report is the unpublished "East Harlem Community Health Study," prepared by Louise Johnson of the Mount Sinai School of Medicine, Department of Community Medicine, in 1972 (hereafter referred to in the text as "EH"). East Harlem ("El Barrio") is the traditional Puerto Rican neighborhood of Manhattan. The "Latin" population as used in this particular study refers to black, brown and white persons of Latin ancestry. Of the total of 424 Latins interviewed, 89 percent were born in the islands of the West Indies, "nearly all of them" in Puerto Rico (EH, p. 2-14).

The third study is "Health Needs of the Disadvantaged in New York State," published by the New York State Health Planning Commission in 1971 (hereafter referred to in the text as "HN"). This study interviewed, among others, sixteen Puerto Rican community spokesmen, of whom fifteen were from urban areas (fourteen from New York City and one from Buffalo) and one was from a semi-urban area (Suffolk County on Long Island).

A. Importance of Health and Health Problems

As shown by the data gathered in the East Harlem study, Latins of all ages and both sexes consider health to be the "most important thing to have from life." Twice as many respondents considered health more important than anything else, including family and money.

When considered as a whole, more than half the Latin respondents stated that health is the most important thing to have from life (Table 37). Blacks and whites were not far behind the Latins in this respect. It must be noted, however, that these high percentages may have been

influenced by the fact that the respondents were aware that the study was conducted under the sponsorship of a school of medicine.

TABLE 37
Most Important Thing To Have From Life, by Racial/Ethnic Group, East Harlem, 1970

Most Important Thing	Latin (N=424)	Black (N=325)	White (N=161)
Money	6%	14%	5%
Family	18	13	23
Job	2	3	1
Religion	4	9	7
Health	56	46	47
Friends	1	2	12
Education	7	9	3
Housing	5	3	1
No answer or don't know	1	1	1
TOTALS	100%	100%	100%

Source: Johnson (1972), p. 4-4.

When the data are disaggregated by age, older persons attributed more importance to health, as might be expected, but the percentage naming health as most important was still twice as high as anything else, except among whites (EH, p. 4-5). By sex, Latin males gave slightly more importance to health than did Latin females, whereas the reverse was true for blacks and whites. Both sexes in all three racial/ethnic groups rated health as far more important in life than any of the other things, including money or family. This result was strongest for Latin males (EH, p. 4-7).

Consistent with these findings, when the respondents were asked what the city should give the most attention to, health again led among the Latins as a whole (Table 38), although only by a small margin. Blacks and whites were more concerned with housing and police protection, respectively, than with health.

When the responses are analyzed by age, the emphasis changes. For younger Latins, greater importance is placed on education; as the respondent's age increases, so does the importance of health care, with a corresponding decline in emphasis on education (EH, p. 4-17). When this question is disaggregated by sex, Latin males place greater stress on education, with health a close second, while Latin females give more

TABLE 38
Problems To Which City Should Give Most Attention, by Racial/Ethnic Group, East Harlem, 1970

Problems	Latin (N=424)	Black (N=325)	White (N=161)
Education	18%	18%	17%
Health	21	17	19
Housing	18	27	18
Police protection	19	20	24
Transportation	1	1	1
Consumer protection	2	1	1
Welfare	10	6	6
Create jobs	10	9	7
No answer or don't know	1	1	7
TOTAL	100%	100%	100%

Source: Johnson (1972), p. 4-15.

weight to health than education (EH, p. 4-18). Regardless of sex, blacks tend to place greater emphasis on housing than do either of the other two ethnic groups.

Among the health problems faced by Puerto Ricans in New York City, drug abuse was considered to be of greatest importance. This was especially true in the case of adolescents, for whom drug abuse was reported by spokesmen as the major health problem more than six times as often as any other (Table 39). Blacks and whites were also of the same opinion, but to a lesser degree than Puerto Ricans. Combatting drug addiction was also regarded as the first priority health need of the black and Puerto Rican communities as a whole, although not in as high a proportion as when regarded as a problem among adolescents (HN, p. 5).

Drug addiction was also perceived as the most urgent health issue in the Puerto Rican community even when compared with several other health issues (Table 40).

Consistent with this emphasis, drug addiction is the problem to which Puerto Ricans in East Harlem feel that doctors should give the most attention. In this respect, it is given far greater importance than any other health problem, cited by more than half the respondents in all three racial/ethnic groups (Table 41). When the East Harlem community is analyzed by age, it is found that the middle age group ranked drug addiction as most important, followed by the youngest group, and then

the oldest group (EH, p. 4-25). Latin men and women did not differ in the rank they assigned to drug addiction. There was again a very great differentiation between addiction and any other health problem (EH, p. 4-27). The same was true for the black and white groups.

TABLE 39

Percent of Spokesmen Citing Given Factors as Major Health Problems of Adolescents, by Racial/Ethnic Group, New York State, 1969

Health Problems	Black (N=25)	White (N=52)	Puerto Rican (N=16)
Drug abuse	65	46	81
Mental hygiene	8	23	12
Socio-environmental limitations	4	10	0
Inadequate facilities/ personnel	4	12	0
Medical disease	19	2	6
Other	0	8	0
TOTAL	100	100	100

Source: New York State Health Planning Commission (1971), p. 10.

TABLE 40

Percent of Spokesmen Stating That Community Perceives Specific Issues As Health Problems, by Racial/Ethnic Group, New York State, 1969

Specific Issue	Black (N=25)	White (N=52)	Puerto Rican (N=16)
Drug ad:	96	71	100
Alcoholism	62	73	56
Venereal disease	58	31	50
Birth control	73	50	63

Source: New York State Health Planning Commission (1971), p. 13.

TABLE 41
Health Problems To Which Doctors Should Give Most Attention, by Racial/Ethnic Group, East Harlem, 1970

HEALTH PROBLEMS	Latin (N=424)	Black (N=325)	White (N=161)
Alcohol	5%	4%	4%
Drug addiction	61	57	57
Death of babies under 1 year	9	10	7
Mental illness	9	11	19
Mental retardation	6	4	3
Venereal disease	5	10	4
No answer or don't know	5	4	6
TOTAL	100%	100%	100%

Source: Johnson (1972), p. 4-24.

B. Medical Care and Health Status

Experience with medical care — or with obstacles to seeking or obtaining it — are varied. There are difficulties of access, problems with language, and the question of the efficacy of care, that is, whether it is worth the trouble. Table 42 shows reasons cited for not seeking help, whether medical or otherwise, based on responses from the Lower East Side of Manhattan. Almost half the responses indicated lack of information as the reason for not seeking help: this was followed in magnitude by lack of time. These results point to the need for information to be communicated to Puerto Ricans regarding both the availability and location of city health agencies. Other factors, as shown in Table 42, also have important effects on the utilization of medical services.

The East Harlem study provides more details as to the reasons for not obtaining medical care, by racial/ethnic status. Latins indicated lack of time, problems of access, and doubts about the efficaciousness of visits somewhat more often than the other racial/ethnic groups. Of these, time problems — being too busy and having to wait too long — were more prevalent among Latins than problems of access and efficaciousness (EH, pp. 7-13, 19, 20). Fear and embarrassment also contributed to not obtaining medical care, factors shared with blacks as well (EH, p. 7-21). One Puerto Rican spokeswoman said that members of

TABLE 42
Reasons Cited by Puerto Rican Families For Not Seeking Help Although A Problem Exists, Lower East Side, 1972

REASONS	N[1]	%[2]
Lack of information	101	47
Lack of time	44	21
Believes agency cannot/will not help	20	9
Apathy	18	9
Needs baby-sitting service	14	7
Found substitute agency	13	6
Agency refused to help	12	6
Lack of cooperation	11	5
Fear	9	4
Lack of funds	8	4
No agency in neighborhood	8	4
Pride	6	3
Health reasons	3	1

Source: Valle Consultants (1975), p. A14.
[1] More than one problem cited per family.
[2] Percentage based on 213 households.

her community do not use health services because of "fear that the doctors will find something really bad" (HN, p. 22).

One clear obstacle to obtaining medical care is the scarcity of Spanish-speaking service personnel. According to the study in the Lower East Side, only 21 percent of Puerto Rican patients were able to use Spanish in a medical hospital while 99 percent would have preferred to do so. The figures for mental hospitals and drug programs are also quite high (Table 43).

According to one urban Puerto Rican spokesman: "From the doctors down, the people in the clinic treat you like numbers, not humans. No matter how sick you are, 'wait your turn.' What difference does it make . . . these are animals and they are being treated by veterinarians" (HN, p. 22). In the New York State study, Puerto Ricans rated almost all health services lower than blacks and whites did. Emergency-room service was rated lowest of all by the Puerto Ricans (Table 44).

In response to a question regarding community participation in setting health service policies and programs, Puerto Ricans and blacks

TABLE 43

Number and Percent of Puerto Rican Families Using Agency Services and Preferences for Use of Spanish Language Communication, Lower East Side, 1972

	Contacts Reported		Spanish Used		Spanish Preferred	
Agencies Contacted	No.	%[1]	No.	%[1]	No.	%[1]
Medical hospital	210	99	44	21	207	99
Public assistance	176	83	17	10	162	92
Housing	142	67	27	19	128	90
Schools	115	54	28	24	100	87
Recreational facilities	97	46	23	24	39	40
Legal services	78	57	28	36	68	87
Employment agency	65	31	14	22	45	69
Settlement house	65	31	39	60	56	86
Courts	62	29	1	2	54	87
Mental hospital	53	25	12	23	47	89
Church	48	23	35	73	42	88
Job training	43	20	12	28	28	65
Child welfare	40	19	3	8	34	85
Loans: bank	36	17	13	36	34	94
Social security	36	17	1	3	31	86
Puerto Rican agency	34	16	28	82	31	91
Day-care center	32	16	18	55	32	100
Tenants association	19	9	8	42	14	73
Community corporation	16	8	10	62	13	81
Drug program	15	7	2	13	10	67
Loan: other	13	6	7	54	10	77
Teen club	12	6	9	75	10	83
Loan company	10	5	3	30	9	90
Political club	9	4	5	56	7	78
Golden age center	1	1	0	0	1	100

Source: Valle Consultants (1975), p. A21.

[1] Based on percentage of those who have had contact.

stated unanimously that there was community interest in such participation (HN, p. 29). One Puerto Rican spokesman said: "I think this is the best thing that could ever happen to this neighborhood . . . People are treated like human beings . . . these services are for them ... They know they can complain about any doctor, any nurse . . ." This is in marked contrast to the evaluation of health care by the Puerto Rican community and speaks strongly for community involvement in health planning policies. In fact, 62 percent of the Puerto Rican spokesmen indicated that "people should control their own destinies, regardless of what the effects on health services would be" (HN, p. 29).

TABLE 44
Percent of Spokesmen Evaluating Health Services as Poor or Bad, by Racial/Ethnic Group, New York State, 1969

HEALTH SERVICES	Blacks (N=26)	Urban Whites (N=22)	Puerto Ricans (N=16)
Inpatient care	27	32	50
Outpatient care	50	36	50
Emergency-room service	73	55	88
Health services other than outpatient	23	18	50
Private physician	15	23	44
Private dentist	12	18	31
Home health care	15	14	19

Source: New York State Health Planning Commission (1971), p. 26.

The East Harlem study addressed itself to the use of spiritualists versus psychiatrists, and home remedies versus pharmacy medicine. Regarding the former comparison, only 6 percent agreed that a spiritualist would be better and 14 percent said they didn't know. Only 7 percent thought that home remedies were better than prescription drugs and 2 percent said they didn't know. The Latin respondents were no more supportive of spiritualists than whites or blacks, and the same was true of using home remedies instead of prescription drugs (EH, p. 7-41).

With regard to evaluations of their own health, Latins tended to give the lowest overall assessment, when compared with blacks and whites in the East Harlem study (Table 45). As might be expected, the older members of all three racial/ethnic groups rated their health lower than did the younger ones. Within each of the three age groups considered, however, Latins tended to evaluate their health as poor more often than did the blacks or whites (EH, p. 5-16). Except among whites, males of all ages were more prone to rate their health as very good or good than females, while the poor self-evaluation of their health by Latins relative to the other racial/ethnic groups was sustained for each age and sex group (EH, p. 5-17).

TABLE 45
Self-Evaluations of State of Health, by Racial/Ethnic Group, East Harlem, 1970

Evaluations[1]	Latin (N=420)	Black (N=321)	White (N=161)
Very Good	33%	37%	44%
Good	31	35	31
Fair	21	15	17
Poor	15	13	8
TOTAL	100%	100%	100%

Source: Johnson (1972), p. 5-14.

[1] Ten persons who said they did not know how to evaluate their own health have been omitted from the table.

In reviewing the health attitudes of Puerto Ricans it becomes clear that one must look beyond the health services system as such, because health cannot be isolated from other problems that plague the community. In Table 46 the degree to which Puerto Rican spokesmen consider certain social issues to be related to health is presented. Of these, racial discrimination manifested a lower relationship to health than housing, education, and unemployment, although all four factors were overwhelmingly seen as relevant. According to one Puerto Rican spokesman, referring to housing, "cold house is equal to pneumonia" (HN, p. 19). The connection with education is severalfold: if people had more education "they would be able to get a decent job and they would eat better" (HN, p. 20). In addition, education on health matters would lead to better nutrition, birth control, and increased ability to prevent

TABLE 46
Percent of Spokesmen Stating That Four Social Issues Are Perceived By Their Community As Related to Health, by Racial/Ethnic Group, New York State, 1969

Social Issue	Black (N=26)	White (N=52)	Puerto Rican (N=16)
Racial discrimination	73	29	69
Housing	85	90	94
Unemployment	81	75	81
Education	85	60	94

Source: New York State Health Planning Commission (1971), p. 18.

illness and care properly for the sick. According to one Puerto Rican spokesman: "Many of the children eat only one good meal, and that is at school" (HN, p. 8).

Medical care is strongly related to patterns of unemployment. With the rise in unemployment over the past few years, many Puerto Ricans — the lowest income group in New York City — have been dropped from medical insurance coverage. Thus, more Puerto Ricans are becoming dependent on free municipal health services at a time when these have been reduced. The municipal hospitals are thereby subjected to increasing demands, there are more negative feelings on the part of the reduced staff, and some people who regard such treatment as discriminatory may not be willing to seek care when it is necessary. Cutbacks have a particularly adverse effect on the delivery of services in the poverty areas where they are most needed.

VII. SUMMARY AND RECOMMENDATIONS

Although this report constitutes the most comprehensive document on health and health services relative to Puerto Ricans in New York City, it should still be regarded essentially as a sketch or outline. The available data and their analysis do not provide a full picture of the health conditions of the Puerto Rican community nor a complete understanding of the Puerto Ricans' knowledge of, attitudes toward, and utilization of health services in New York City. The compilation and interpretation of the diverse statistics, however, serve as a preliminary account of the health situation in the Puerto Rican community and can be used as a stimulus to future research in the area of health. In keeping with the latter function, two general comments on data collection are appropriate.

A. Definitions and Data

First, the research conducted for this monograph has revealed that different hospitals and health agencies often lump Puerto Ricans into heterogeneous categories such as "Minority," "Hispanic," "Spanish-speaking," or "Spanish-surnamed." They are also inconsistent in their definition of the term "Puerto Rican," which in some cases applies only to those born in Puerto Rico and in others to this group plus their U.S.-born children.

Recommendation 1

All health agencies collecting data in New York City, whether public or private, should consistently use the following standard categories for all Hispanic clients: "Puerto Rican," "Other Spanish Origin." These two categories should be based on self-identification and include as many generations as the client chooses to recognize. An additional item on place of birth should permit identification of the Puerto Rican born and the foreign born within these categories.

The second general comment on the data collection process arises from preliminary meetings with Puerto Rican health professionals, in which it became clear that in this report the discussion of the incidence

and prevalence of specific ailments was too limited because some health problems of importance to the Puerto Rican community were not included. Consequently, it was suggested that statistics should be gathered and published on hypertension; anemia and sickle-cell anemia; obesity; malnutrition and vitamin deficiency; urinary tract infection; respiratory ailments; uterine cancer; dental deficiencies; and diabetes.

Research for the monograph disclosed that these data either were not available or did not contain a racial/ethnic breakdown, as far as morbidity is concerned. Mortality figures do reveal, however, that Puerto Rican children under age 15 suffer higher death rates from influenza and pneumonia than the same age group in the general population. The percentage of the Puerto Rican population age 45 and over that dies from diabetes is also greater than the comparable figure in the total population.

Recommendation 2

All responsible agencies should routinely collect current information by racial/ethnic group on the incidence and prevalence of those ailments thought to afflict Puerto Ricans and publish it in a form that is regularly and readily accessible to all interested parties.

The present monograph can also be utilized as a point of departure for bringing about constructive improvements in the health status of Puerto Ricans in New York City. For the purpose of moving toward this goal, a series of substantive recommendations are offered in the remaining pages. These recommendations are fragmentary in that they are based almost exclusively on the findings of the present report; they are tentative in that they are as yet uninformed by extensive direct consultation with professional health planners and members of the Puerto Rican community. The recommendations start from the premise that equality of health care is a right of all citizens and that the most effective way to attain this is by creating a universal system of publicly supported health services.

B. Mortality and Morbidity

The report focuses first on the mortality rates of Puerto Ricans. The data indicate that the high percentage of young persons in the Puerto Rican born population of New York City makes it necessary to analyze

causes of death by age, in addition to considering mortality for Puerto Ricans as a whole. It was found that there is a high accident mortality for Puerto Ricans in all age groups under 65, compared with the total population in the same age groups.

Recommendation 3

An investigation should be conducted into the causes of the high incidence of accident-related mortality among Puerto Ricans, particularly in the age group under 15, where accidents account for 28 percent of all deaths.

A bilingual educational campaign should be undertaken with the aim of helping to reduce the high Puerto Rican mortality due to accidents.

The total population of New York City, which has a higher median age than the Puerto Rican population, experiences consistently higher mortality rates from causes such as heart disease and cancer, which are ordinarily degenerative. Puerto Ricans, on the other hand, are more likely to die at younger ages from violent causes, that is, from accidents and homicides. In the 15-44 year old category, the homicide rate is more than twice the rate for the total population in the same age group. In fact, almost 20 percent of all deaths of Puerto Ricans in this group are due to homicide.

The following minimal recommendation is proposed:

Recommendation 4

A commission should be established to investigate the causes of these homicides. Such a commission should avail itself not only of police and law enforcement data, but also of information from psychiatrists, group workers, family counselors and the like.

Existing local volunteer law-enforcement programs independent of the police should be developed further and include greater and more effective Puerto Rican participation. The emphasis should be on the use of preventive methods necessary to reduce the number of homicides.

Mortality from cirrhosis of the liver is the third most common cause of death for Puerto Ricans in the age groups 15-64; this illness is frequently caused by excessive intake of alcohol.

Recommendation 5

A campaign against alcoholism should be conducted through the Spanish-language media of the metropolitan area. This campaign should include publicity for local agencies dealing with alcoholism and school-based information programs to assist alcoholic students and those who have alcoholics in their families.

The data regarding maternal and infant mortality show that between 1963 and 1976 minority deaths from these causes experienced a steady decline, with the rates for Puerto Ricans converging closely to those of the white population. This represents an important achievement, but little information is available on the morbidity suffered by Puerto Ricans during pregnancy and childhood. As noted below, obstetric, gynecological, and pediatric services are in high demand by the Puerto Rican community, and the quality and distribution of the relevant specialists need improvement.

In the second chapter, the statistics indicate that for both Puerto Ricans and blacks the rate of admission to mental health and mental retardation facilities is more than twice the comparable rate for whites. The data also show that the rate of admission for persons diagnosed as mentally retarded is much higher for Puerto Ricans than for blacks or whites.

One of the difficulties with the diagnoses made of Puerto Ricans is that the mental health services of New York City do not have sufficient bilingual or bicultural personnel to make an adequate psychiatric assessment of Puerto Ricans and it is therefore possible that biases are contained within the data. The staff who fill out admission forms in these mental health and retardation facilities have fewer problems in diagnosing whites than in diagnosing blacks and Puerto Ricans.

Another possible bias is encountered in the data on mental retardation. The proportion of admissions characterized as severely or profoundly retarded is significantly higher among Puerto Ricans than among blacks and whites. This again may be accounted for by the cultural and linguistic differences between Puerto Ricans and the staff who diagnose them.

In order to improve the diagnostic procedures at mental health and mental retardation facilities, the following recommendation is made:

Recommendation 6

More Puerto Ricans and Hispanics must be hired by mental health and mental retardation facilities, especially for those positions involved in admissions and diagnosis; this applies to psychiatrists and other professionals as well as to clerical personnel.

Mental retardation programs should include Puerto Ricans and other Hispanics in policy-making positions who are able to implement hiring practices that would bring greater numbers of bilingual and bicultural personnel into the appropriate agencies.

The problem of the definition of mental illness should be carefully studied and innovations in diagnosis and treatment should be evaluated. The area of mental retardation should receive special attention so that adequate means of diagnosis and treatment of Puerto Ricans can be developed.

A special study by an appropriate agency must be undertaken in order to examine any possible connection between malnutrition and mental retardation in the Puerto Rican community.

Drug abuse is clearly a serious health problem for the Puerto Rican community, where it is the sixth leading cause of death; among those aged 15 to 44 it ranks second. Drug dependence is also related to mental health problems, as shown by the fact that 5 percent of the Puerto Ricans included in the Narcotics Register are reported by community mental health facilities, including hospital units. Puerto Rican concern about narcotics is demonstrated by their ranking of drug abuse as the most important health problem in their community. Although blacks had the highest recorded rate of newly reported addicts in each of the four years between 1971 and 1974, their rate declined steadily from year to year. For Hispanics, however, the rate in 1974 was much higher than it had been in the two preceding years.

Whether or not drug addiction has declined since 1974 among Puerto Ricans and blacks in New York City is not certain. It appears that heroin addiction is not as prevalent as it was in the sixties and early seventies, but most probably it has been replaced by an increase in alcohol abuse and dependence on other narcotics. What is significant is that this problem undoubtedly still exists, that it is of great concern to the community, and that the socio-economic factors contributing to drug and alcohol abuse (such as high unemployment among black and Puerto Rican teenagers) have worsened since 1974.

Recommendation 7

All programs of drug prevention and rehabilitation funded by taxpayers which are not effective in attracting Puerto Rican clients, or which show no significant influence in lowering their rates of drug addiction, should be replaced by programs designed for the Puerto Rican population. If necessary a suit should be filed for legal action to ensure progress toward these ends.

A campaign against drug abuse should be undertaken following the model proposed above for a campaign against alcoholism. Special emphasis should be given to an information program in the schools, as more than 50 percent of Hispanic addicts reported to the Narcotics Register are under the age of 25.

The review of the decline in lead poisoning among children is encouraging. It reveals the relative success of the public campaign in 1970-1971 against the use of lead paint and provides one example of the level of effort and kinds of techniques that are required to make a significant contribution toward the eradication of a health problem.

C. Services and Manpower

The third chapter discusses the use of hospital services. Not unexpectedly, statistics show that blacks and Hispanics rely heavily on the municipal (public) hospitals of New York City for emergency, outpatient, and inpatient treatment. Because of economic necessity, they are much more likely to utilize the municipal hospitals than the voluntary (private) hospitals, while the white population visits the voluntary hospitals at twice the rate of municipal facilities. The data also show a tendency for welfare recipients to use the municipal hospitals. Together with the figures on white utilization of voluntary hospitals, this suggests that there are essentially two separate health systems: one for whites and working people and another for minorities and welfare recipients. Hence, the reduction or elimination of services in municipal hospitals during recent years undoubtedly has had disproportionate effects on Puerto Ricans, who are most dependent on them.

Recommendation 8

As a long-range goal, the elimination of differences between voluntary and municipal hospitals should be sought, in order to provide all citizens with equal services.

In terms of the methods of payment used by different groups in emergency rooms and outpatient clinics, the data show that Medicaid is used primarily by blacks and slightly less by Hispanics, while less than a quarter of whites use this method of payment. Although Hispanics utilized Medicaid slightly more than self-pay, Medicaid usage should have been higher when one considers the relatively large proportion of Hispanics who have low incomes or who are on welfare.

Recommendation 9

An investigation must be conducted to examine the causes of the unusually high self-payment rate by the poorest sector of the New York City population. It must be determined whether Hispanics are not meeting all the qualifications required by Medicaid and Medicare, as well as those required by private health insurance programs such as Blue Cross-Blue Shield, or whether they think they are ineligible and therefore apply less for these programs than other groups. Specifically, it must be ascertained whether government agencies are guilty of discriminatory or exclusionary practices in disapproving Puerto Rican applications for Medicaid and Medicare. If violations of Puerto Rican civil rights are found, appropriate legal action must be taken against the violators.

The visits to outpatient clinics were classified by the specialty of the clinic visited. As shown by the data, the most visited clinics by Hispanics were pediatrics and obstetrics. Hispanic visits to the pediatrics clinic constituted the largest percentage of visits to a particular clinic by any racial/ethnic group.

Recommendation 10

A policy priority should be to shift pediatricians and obstetricians to the hospitals that are most accessible to Puerto Ricans. Specific utilization of mobile teams would also be particularly helpful in meeting the demand.

The availability of physicians in private practice in New York City varies greatly among boroughs and within each borough. Manhattan has the highest rate of physicians per 100,000 population, while the Bronx and Staten Island have the lowest rates. The rate of physicians within Puerto Rican health areas of Manhattan, the Bronx and Brooklyn (the three boroughs containing such areas) is at best half that of the borough as a whole. The greatest difference exists in Manhattan, where the rate of physicians in Puerto Rican health areas is one-fourth the rate for the entire borough. For all of New York City, the rate of physicians in Puerto Rican health areas is less than half the rate for all health areas combined. These basic patterns showed no improvement between 1967 and 1975.

The report also details the quality of the physicians in private practice whose offices are located in low-income census tracts, where the Puerto Rican population tends to be concentrated. Using the three criteria of age of the physician, membership in professional societies, and number of hospital appointments, the data reveal that low-income areas have the least qualified doctors.

Recommendation 11

Tax incentives, fee supplements, and other means should be devised to enable private physicians serving in poverty areas to exceed the income achieved by their counterparts in affluent areas that offer compensatory amenities.

Provisions such as those in force for the City University's Biomedical School, whereby new graduates are assigned to service in poverty areas with the lowest doctor-patient ratios, should be extended to other city-based medical schools.

The need to identify bilingual-bicultural students and to provide professional training for them is urgent. This must take the form of organized programs in cooperation with medical schools to recruit and train such personnel.

Physicians in the prime of their professional careers with full-time private practices in low-income areas should be given preference in hospital appointments, paid memberships in professional associations, and other incentives to achieve and maintain the highest quality of service.

Employment patterns in the municipal hospitals of New York City indicate that while blacks enjoy a favorable representation in most

occupations — higher than whites in many cases — Puerto Ricans rank far below both groups. The representation of Puerto Ricans is inversely proportional to the prestige of the occupation. According to 1971 data, Puerto Ricans constituted only 4 percent of all employees classified as officials or administrators and only 2 percent of all professionals. In the latter category 52 percent were white, 28 percent black, and 19 percent Chinese and other minorities. In the light of these findings, in 1973 the New York City Commission on Human Rights urged strongly that Puerto Ricans be accorded more equitable representation in municipal employment. Subsequent data for 1974-1977 fail to show that this has occurred.

These data are confounded because Puerto Ricans are lumped together with other "Spanish-surnamed or Hispanic" employees. In 1971, when these groups could be analyzed separately, it was found that other persons of Spanish origin tended to be more strongly concentrated in the higher-level occupations than Puerto Ricans. Regardless of this distinction, the data show that the availability of bilingual and bicultural health services by Puerto Rican professionals falls far short of the demand for such services on the part of Puerto Rican clients in the municipal facilities.

Recommendation 12

Highest priority should be given to recruiting Puerto Ricans into the public health services system, particularly at the level of physicians, nurses, officials, and administrators. If the local supply of such personnel is insufficient, then they should be sought nationally and in Puerto Rico. Preference should also be given to hiring bilingual professionals from Latin America over those from other continents.

Recruitment, application, examination, promotion, and dismissal procedures should give proper weight to the mastery of bilingual and bicultural skills. Qualification for each job, from the lowest level through management, should be based on the content of the occupation rather than on sheer credentials. Dismissals should be justified on grounds other than seniority, which perpetuates current inequities.

Employment records must maintain the distinction stipulated in Recommendation 1 above and not collapse categories to "Spanish-surnamed" or "Hispanic," as this distorts the nature of employment patterns for Puerto Ricans.

The paucity of professional placements for qualified Puerto Ricans in the city health and hospital systems, as well as present procedures for dismissals, should be the object of a legal suit. Where necessary, the suit should seek to impound federal funds for health services provided by carriers that are in violation of affirmative action requirements for the hiring of Puerto Ricans.

D. Attitudes and Actions

The last chapter reviews the findings of several interview surveys on Puerto Rican attitudes toward health. A study of East Harlem showed that a majority of Puerto Ricans interviewed considered health to be "the most important thing to have from life," although blacks and whites were not far behind. Consistent with this finding, when the respondents were asked what the city should give the most attention to, health again was the leading response among Puerto Ricans while blacks and whites tended to be more concerned with other problems. By contrast, in a self-evaluation of their state of health, Puerto Ricans scored the lowest of the three racial/ethnic groups.

In spite of this, Puerto Ricans often do not seek help even when they recognize that a problem exists. Two principal reasons indicated for this inaction are lack of information and lack of time. The latter includes being too busy and having to wait too long for medical services. Puerto Ricans rated almost all health services lower than blacks and whites did, with emergency-room service rated lowest of all.

Another obstacle to obtaining medical care is the scarcity of Spanish-speaking service personnel. In a study of the Lower East Side of Manhattan, interviews of Puerto Ricans showed that while 99 percent preferred services in Spanish at medical hospitals, only 21 percent were able to obtain them. The percentages for mental hospitals were similar in both the category of preference and that of actual experience (89 versus 23 percent), while the comparable figures for drug programs were 67 and 13 percent, respectively.

Recommendation 13

More information in Spanish and English must be made available to Puerto Ricans regarding the location, hours, and costs of all facilities providing services relevant to their particular health needs. All media that reach the Puerto Rican community

should be utilized, with details given as to the Spanish-speaking persons who will be available for different kinds of consultation. Waiting-time at all facilities must be reduced by a more efficient use of staff, including priority assignment of Spanish-speaking personnel to attend to Puerto Rican and other Hispanic clients. The number of such personnel must be increased at all levels in order to meet the clear demand for their services.

In response to a question asked in one study regarding community participation in setting health-service policies and programs, Puerto Rican and black spokesmen stated unanimously that there was community interest in such participation. This is consistent with the strongly negative evaluation of current health care by the Puerto Rican community.

Recommendation 14

The governing bodies of all health agencies should have Puerto Rican representation in proportion to their use of the services dispensed. The number of independently financed health units should be increased, especially those that are largely Puerto Rican in staff and clientele located in poor neighborhoods.

Among the health problems faced by Puerto Ricans in New York City, drug abuse was considered to be the most important, especially in the case of adolescents. Combatting drug addiction was regarded as the first priority health need, the most urgent of several health issues, and the problem to which doctors should give the most attention.

Recommendation 15

In line with Recommendations 5 and 7, a major offensive must be launched against the epidemic of drug dependence, one of the leading causes of death in the Puerto Rican population. The principal focus should be on the youth of the community, with an emphasis on preventive measures.

In one study, it was found that Puerto Rican spokesmen overwhelmingly considered social issues such as housing, education, unemployment, and racial discrimination to be related to health.

Recommendation 16

A broad-scale attack reaching beyond the health services system must be sustained in order to eradicate the underlying conditions that are responsible for the health problems of the Puerto Rican population of New York City.

Considerable merit attaches to the view that there can be no substantial solution to the health problems of Puerto Ricans in New York City without abolishing the poverty that is their common lot. The above recommendations, however, are based on the assumption — which remains to be tested — that direct improvements in the health sector can be achieved in a shorter time frame and perhaps contribute to a transformation of the conditions in which Puerto Ricans live.

It is hoped that the recommendations will give rise to specific programs for changing those instances of inadequate health services that are detailed in the report. It is anticipated that they will be modified and expanded in a process of community involvement aimed toward restructuring these conditions. It was intended that they focus on matters of policy rather than on the tactics of today or the imponderables of an indefinite future.

SELECTED BIBLIOGRAPHY

Alers, Jose Oscar
1978 "Health Attitudes Among Puerto Ricans in New York City." Science-Ciencia 5:54-61.

American Public Health Association
1974 Minority Health Chart Book. 102nd Annual Meeting, New Orleans, Louisiana.

Blue Cross
1976 New York State Summary of Findings, 1975 Inpatient Census, August 1976, Report No. 1.

Blue Cross-Blue Shield
1975 Who Uses Ambulatory Care Services? ACS Report No. 3, New York.

Cantor, Marjorie H.
1973 "The Elderly in the Inner City." Paper presented to Institute of Gerontology and Graduate Education for Social Work, Fordham University.

1974 "Health of the Inner-City Elderly." Paper presented at 27th Annual Meeting, Gerontological Society, Portland, Oregon. (Offset by Office of the Aging, City of New York).

1975 "Life Space and the Social Support System of the Inner-City Elderly of New York." Gerontologist 15:23-26.

Community Council of Greater New York
1974 Characteristics of the Population in New York City Health Areas: 1970 No. 4, Race and Ethnicity.

Epstein, Annette
Unpublished. "Vital Statistics of New York City Puerto Rican Population." Vertical file, Public Health Library, New York City Department of Health.

Fitzpatrick, Joseph P., and Gould, Robert E.
1972 "Mental Health Needs of Spanish-Speaking Children in the New York City Area." In American Orthopsychiatric Association, On The Urban Scene. Detroit, Michigan: Wayne State University.

Fuchs, Victor R.
1974 Who Shall Live? Health Economics and Social Choice. New York: Basic Books.

Gartell, Leland E.
1973 Population 65+ New York: Presbyterian Senior Services.

Guinee, V. F.

1972a "Epidemiological Studies of Lead Exposure in New York City." Proceedings, International Symposium, Environmental Health Aspects of Lead. Amsterdam, 763-772.

1972b "Lead Poisoning." The American Journal of Medicine 52:283-288.

Guyot, James F.

1975 "The Puerto Rican Population in New York City: Who Counts Depends On How You Count." New York City Perspectives. 2(2).

Health and Hospital Planning Council of Southern New York

1974a General Hospitals and Related Health Services in Brooklyn.

1974b Physicians' Staff Appointments in Southern New York, October 1967.

Imperato, Pascal James, and Wing, Glenn

1974 "A Study of Patient Population in New York City Tropical Disease Clinics." Acta Tropica, Separatum 31(2).

Johnson, Louise A.

1972 East Harlem Community Health Study. New York: Mt. Sinai School of Medicine.

Kessner, David M.; Singer, James; Kalk, Carolyn E.; and Schlesinger, Edward R.

1973 Infant Death: An Analysis by Maternal Risk and Health Care. Washington, D.C.: Institute of Medicine/National Academy of Sciences.

Layzer, Judith

1970 Ethnic Survey of Hospital Employees. Contract Compliance Office, Office of the Mayor, New York City.

Malzberg, Benjamin

1956 "Mental Diseases Among Puerto Ricans in New York City." Journal of Nervous and Mental Disorders, 123: 262-269.

New York City, Addiction Services Agency

1971 The City of New York Comprehensive Plan For the Control of Drug Abuse and Addiction.

1975a "Alcohol Used By 80% of Mixed Drug Abusers in New ASA Research Study." Items and Issues, Summer: 1.

1975b "Client Admission Analysis as of Dec. 31, 1974" and "Summary of Programs Having Puerto Ricans and/or Hispanic Cultural Orientation."

New York City, Commission on Human Rights

1973 The Employment of Minorities, Women and the Handicapped in City Government, A Report of a 1971 Survey.

New York City, Department of Health, Bureau of Health Statistics and Analysis.

1971 Selected Vital Statistics on Puerto Ricans and Total Population, 1969-1971. Unpublished Tables.

1973 Summary of Vital Statistics 1973, The City of New York.

1976 Summary of Vital Statistics 1976, The City of New York.

New York City, Department of Health, Narcotics Register

1975 New York City Narcotics Register: 1974 Statistical Report.

New York City, Department of Health, Office of Biostatistics

1977 The Distribution of Physicians by Small Areas of New York City, July 1975.

New York City, Health Services Administration, Bureau of Tuberculosis Control

1974 New Active Cases of Tuberculosis, New York City, 1974.

New York City Planning Commission

1974 Community Planning District Profiles, Part II, Socio-Economic Characteristics.

New York State Department of Health, Office of Biostatistics

1973 Trends in Narcotics Abuse in New York State, Second Edition, Albany.

New York State Health Planning Commission

1971 Health Needs of the Disadvantaged in New York State. Albany.

Pomeroy, Richard, and Torres, Aida

1972 "Family-Planning Practices of Low-Income Women in Two Communities." American Journal of Public Health, 62: 123-129.

Puerto Rican Forum

1970 A Study of Poverty Conditions in the New York Puerto Rican Community, Third Edition.

Rabkin, Judith G. and Struening, Elmer L.

1976 Ethnicity, Social Class and Mental Illness. Institute on Pluralism and Group Identity. New York.

Scrimshaw, Susan, and Pasquariella, Bernard

1971 "Variables Associated With The Demand For Female Sterilization in Spanish Harlem." Advances in Planned Parenthood, 6:133-141.

U.S. Bureau of the Census

1970 1970 Census of Population: Characteristics of the Population, New York State.

1973 1970 Census of Population: Subject Reports. Final Report PC(2)-1E. Puerto Ricans in the United States.

1975 Persons of Spanish Origin in the United States: March 1974, Current Population Reports, Series P-20 (no. 280).

U.S. Commission on Civil Rights

1974 Counting the Forgotten. Washington, D.C.

U.S. Department of Health, Education and Welfare

1973 The Ten-State Nutritional Survey, 1968-1970, Vol. 1-5 and Highlights.

Valle Consultants

1975 What Holds Sami Back? A Study of Service Delivery in a Puerto Rican Community.

Welton, John and Imperato, Pascal

1975 "Schistosomiasis in New York City." Bulletin of the New York Academy of Medicine, Second Series, 51 (2): 263-271.